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DRAWING TITLE :

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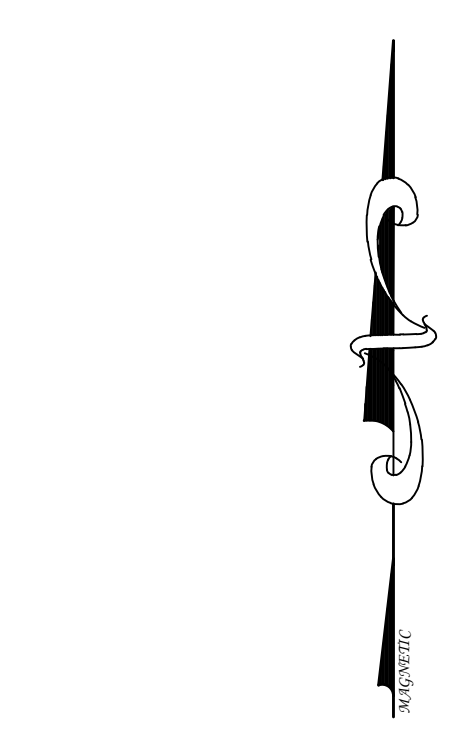
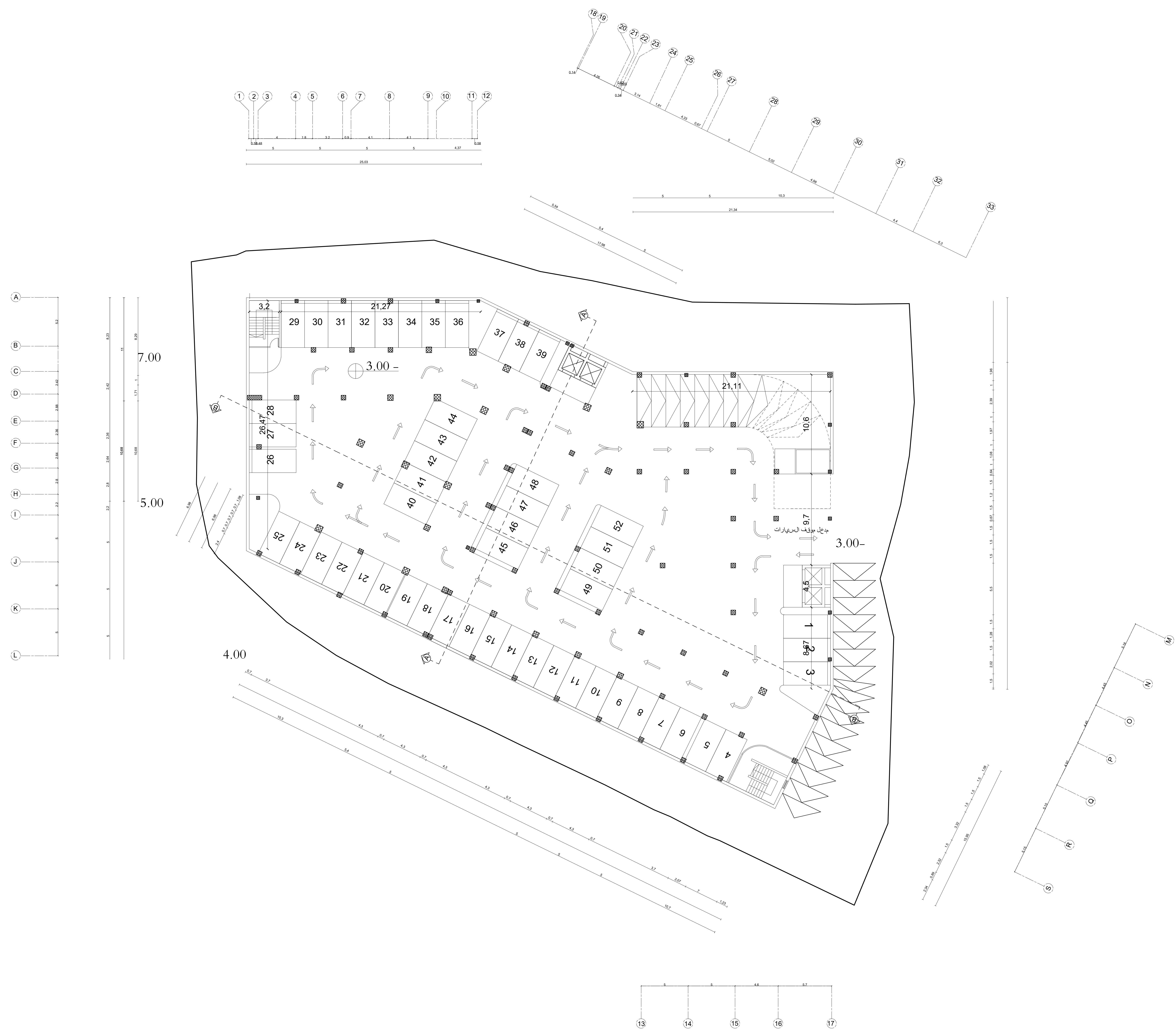
Supervisor :

Eng- shadi qumsiah

Designed by :

*shaimaa mosleh
moatasem zedat
mohamad salameen
nadeen melhem*

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DRAWING TITLE :

**-2 Basement
Floor Plan**

Supervisor :

Dr Wael Shaheen

Designed by :

Omar Qwasmi

<i>SCALE</i>	<i>No. of DRAW</i>
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DRAWING TITLE :

**-1 Basement
Floor Plan**

Supervisor :

Dr Wael Shaheen

Designed by :

Omar Qwasmi

SCALE

1/200

No. of DRAW

A03





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DRAWING TITLE :

*Ground Floor
Plan*

Supervisor :

Dr Wael Shaheen

Designed by :

Omar Qwasmi

SCALE

No. of DRAW

1/200

A04





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DRAWING TITLE :

First Floor Plan

Supervisor :

Dr Wael Shaheen

Designed by :

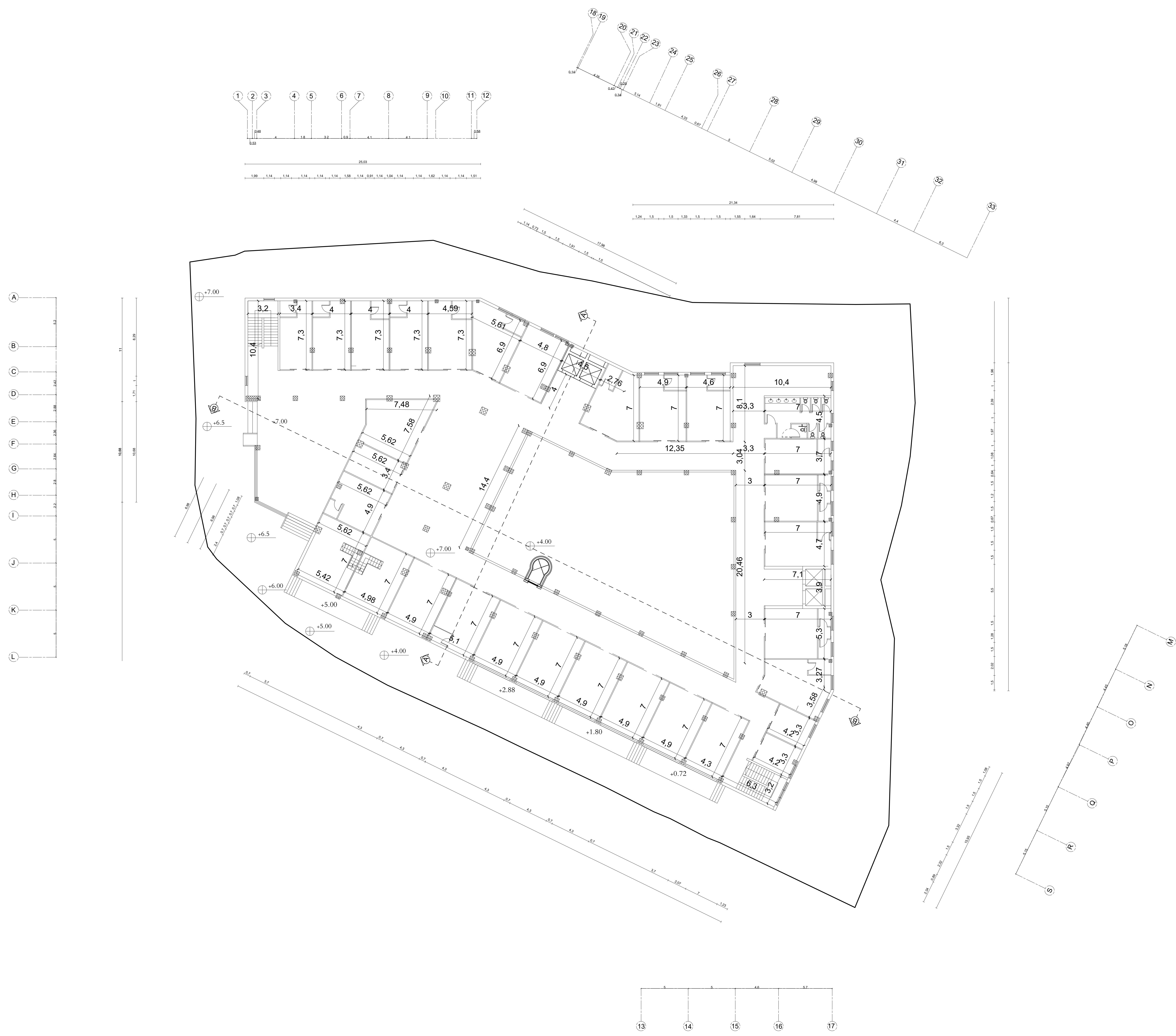
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DRAWING TITLE :

*Second Floor
Plan*

Supervisor :

Dr Wael Shaheen

Designed by :

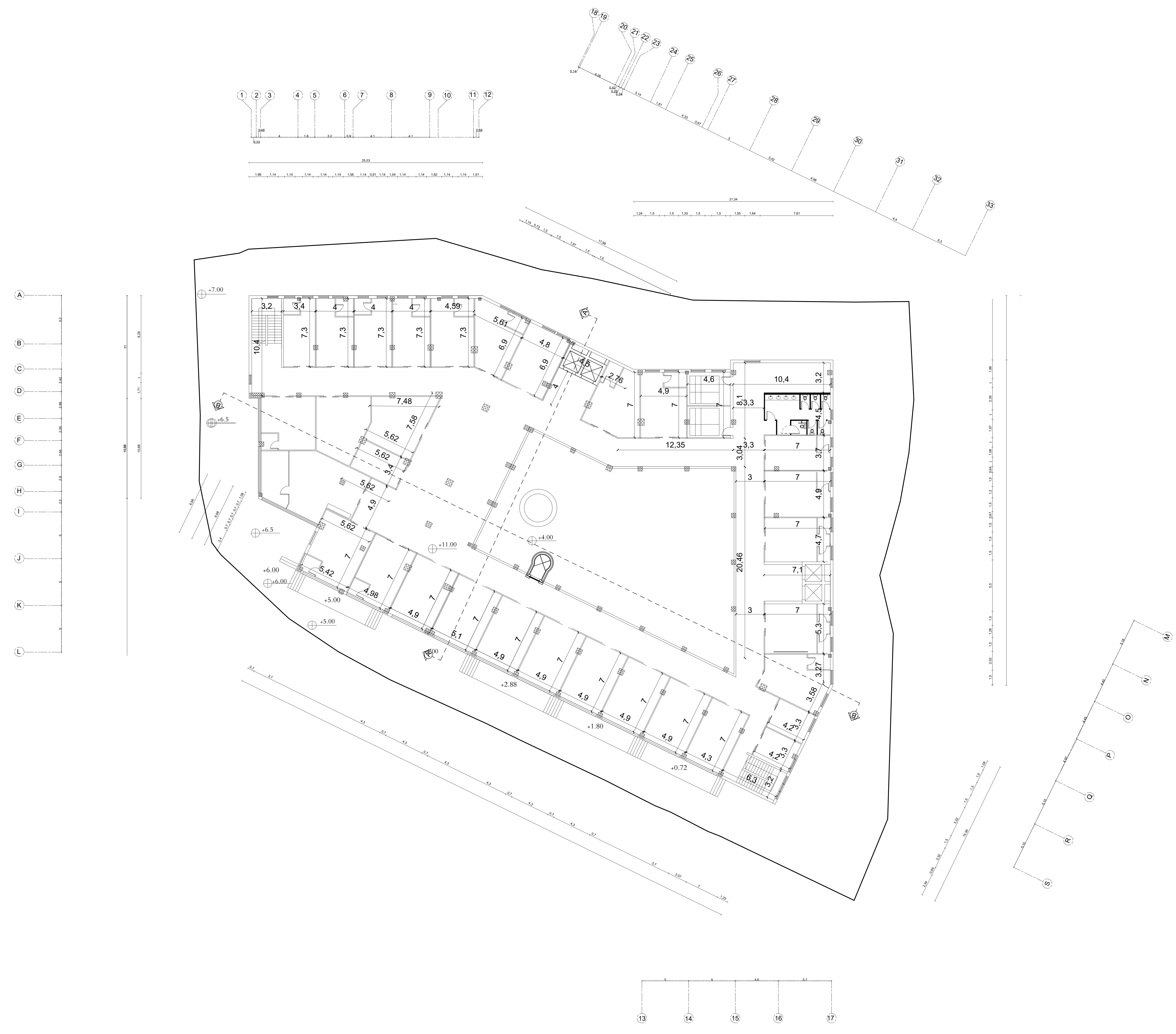
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DRAWING TITLE :

**Fuorth Floor
Plan**

Supervisor :

Dr Wael Shaheen

Designed by :

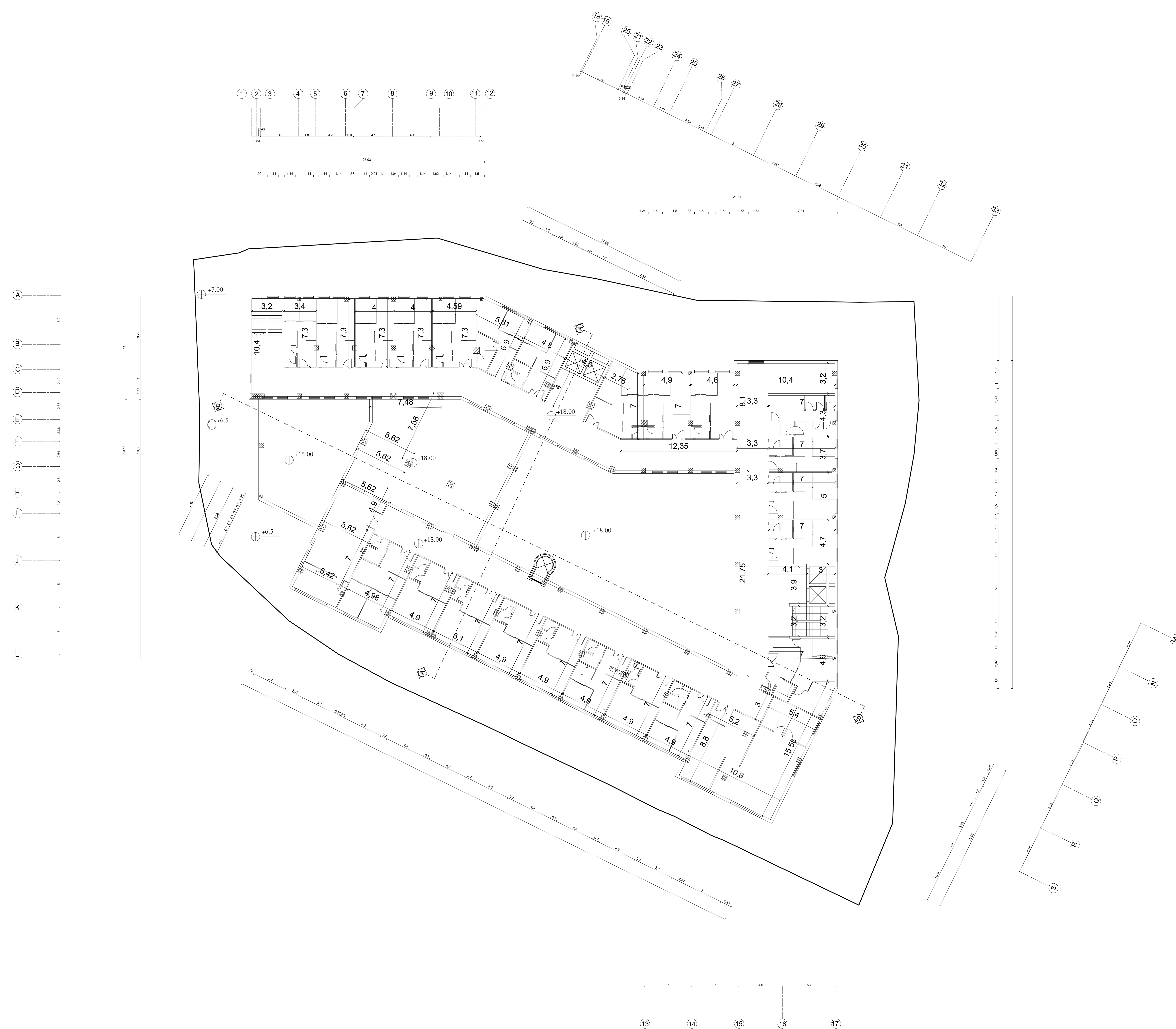
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DRAWING TITLE :

Fifth Floor Plan

Supervisor :

Dr Wael Shaheen

Designed by :

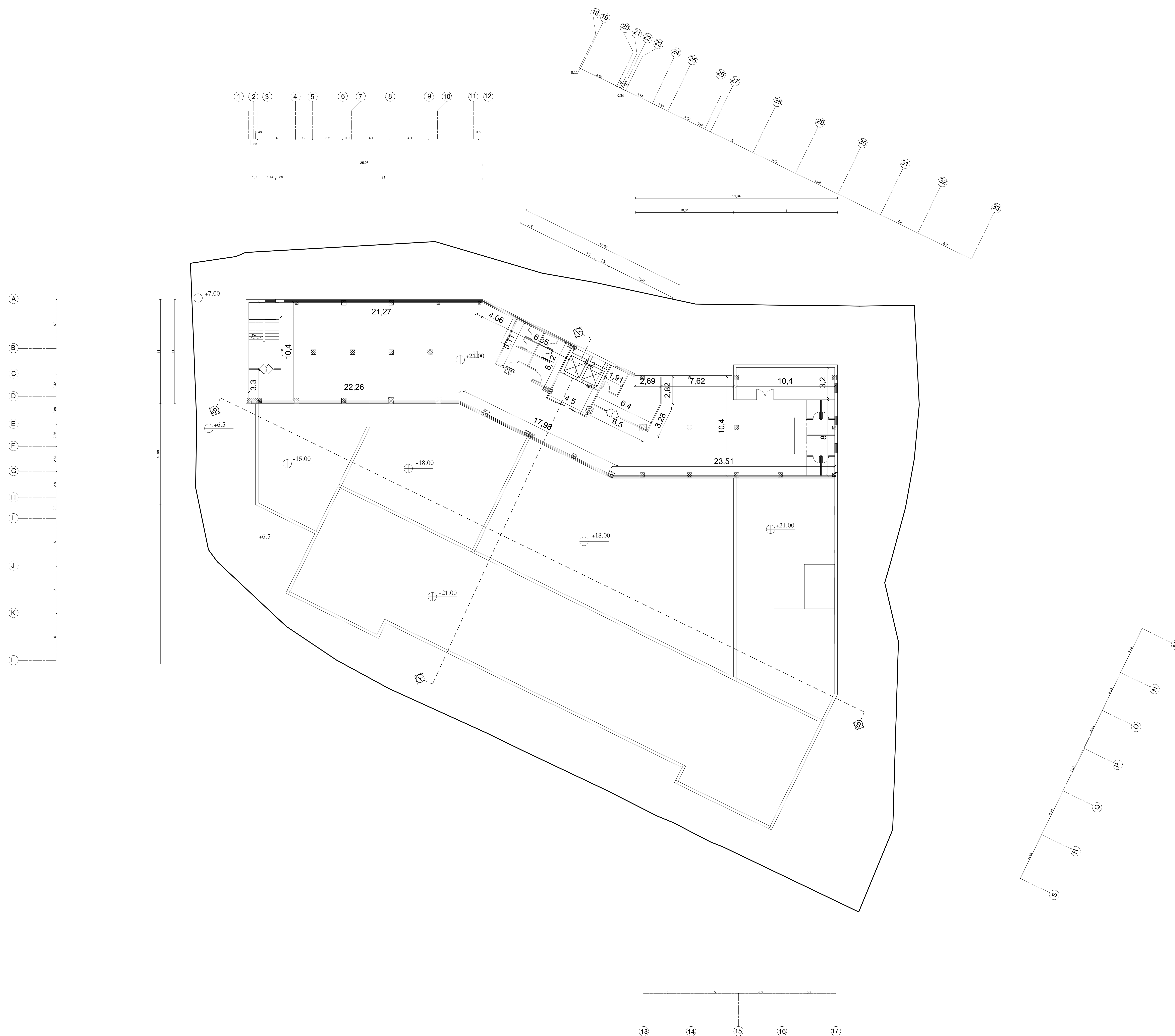
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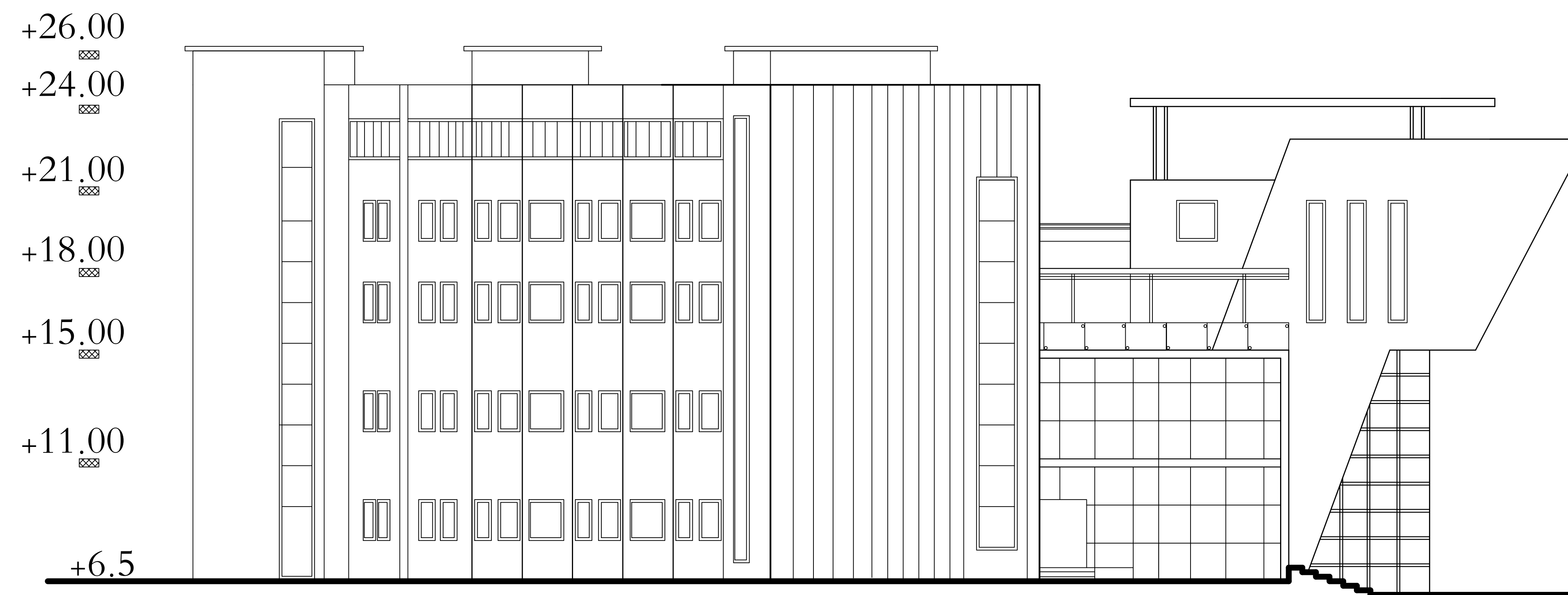
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DRAWING TITLE :

Elevations

Supervisor :

Dr Wael Shaheen

Designed by :

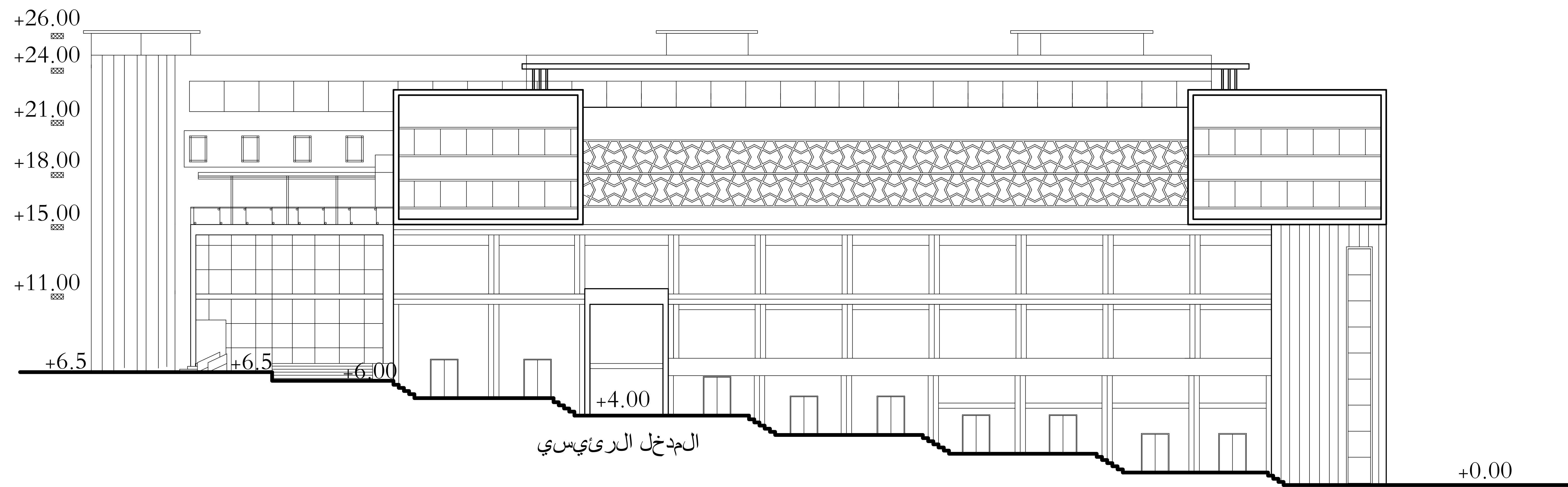
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No. of DRAW

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DRAWING TITLE :

Elevations

Supervisor :

Dr Wael Shaheen

Designed by :

Omar Qwasm

<i>SCALE</i>	<i>No. of DRAW</i>
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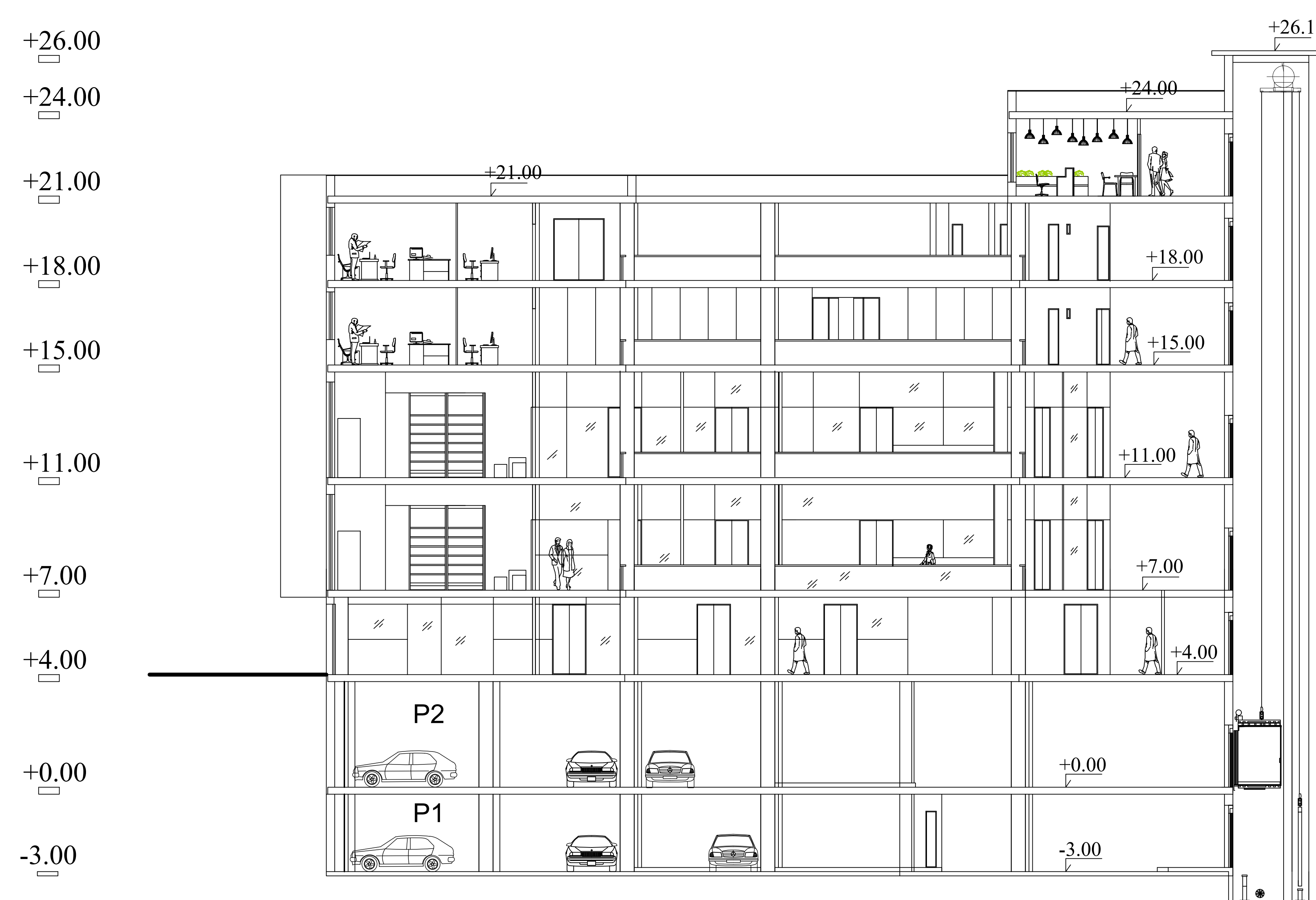
Elevations

Supervisor :

Dr Wael Shaheen

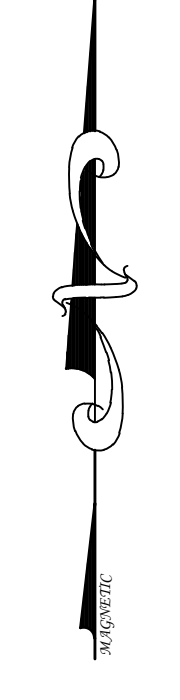
Designed by :

Omar Qwasm



SECTION A-A

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Supervisor :

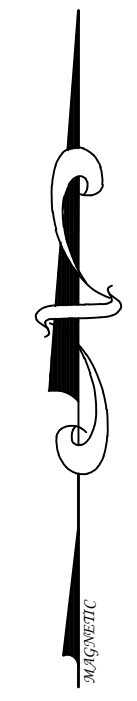
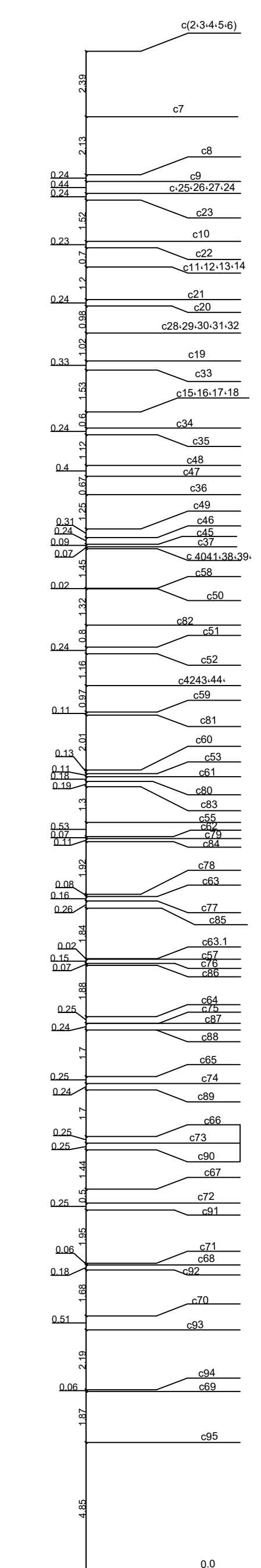
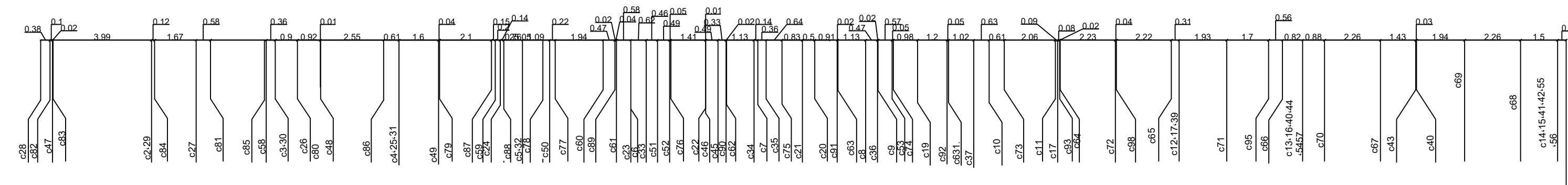
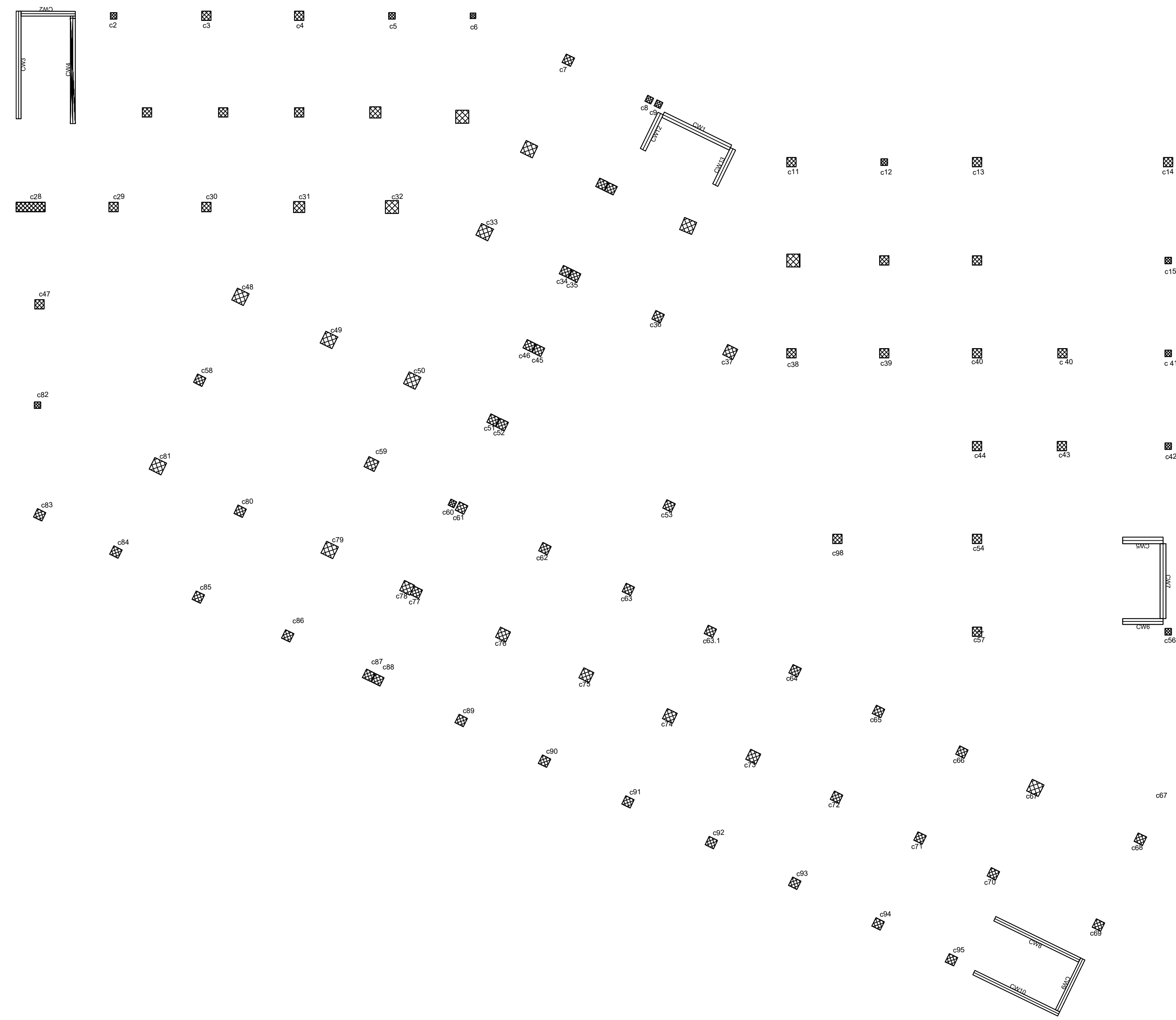
Dr Wael Shaheen

*Designed by :
Omar Qwasm*



SECTION B-B

<i>SCALE</i>	<i>No. of DRAW</i>
<i>1/200</i>	A13



Palestine

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DRAWING TITLE :
Center Of Columns

Supervisor :
Eng- shadi qumsiah
Designed by :
shaimaa mosleh
moatasem zedat
mohamad salameen
nadeen melhem

<i>SCALE</i>	<i>No. of DRAW</i>
<i>1/200</i>	<i>A14</i>

Structural Design Criteria & Specifications & Construction Requirements

GENERAL NOTES

1. CODE OF PRACTICE

Detailing and workmanship shall be according to ACI provided 318-08, and the technical specifications Approved equivalent international codes shall be accepted. Design for concrete done according to ACI 318-08 Uniform Building Code (UBC) For the definition of lateral Seismic Loading.

2. DIMENSIONS

- a) GRAVITY LOADS ESTIMATION ARE IN ACCORDANCE OF JORDAN
- b) UNLESS OTHERWISE INDICATED ON DRAWINGS ELEVATIONS ARE IN METERS, DISTANCES AND DIMENSIONS IN cm., REINFORCEMENT BAR SIZES IN mm.

3. DRAWINGS

- 1- Structural drawings shall be read in conjunction with Architectural.
- 2- Sleeves and openings smaller than 200x200mm are not shown on the Structural drawings . For required openings refer to Architectural . Mechanical and Electrical drawings .
- 3- Contractor shall prepare working drawings and bar bending schedules for reinforcement in a format agreed with the engineer .
- 4- Contractor shall supply detailed drawings and calculations for all support and temporary works and propping systems as applicable and all other relevant information subject to the Engineer's approval prior to commencement of construction .

4. REINFORCEMENT

- 1- Reinforcement shall be deformed high strength steel bars of characteristic strength of 420 Mpa complying with ASTM standards or equivalent for diameters 10mm & above .
- 2- Reinforcement shall be deformed steel bars of characteristic strength of 420 MPa complying with ASTM standards Or equivalent for diameters 10mm & below .
- 3- Contractor to provide bar bending schedule.
- 4- Where bar length is not specified , longest practicable bar length shall be employed with staggered lap splices.

5. REINFORCED CONCRETE

The following 3 types of reinforced concrete shall be employed:

- B300 - Grade 300 for reinforced concrete members except architectural fair faced concrete facades
Characteristic Strength as defined by a 150 mm cube at age of 28 days shall be:
- B300 - $30 \times 0.8 = 24$ MPa (Because it is rectangular section)
Minimum cement content, per cubic meter, shall be:
B300 - 300 kilograms

6. PLAIN CONCRETE

The following type of plain concrete shall be employed:

- B150 - Grade 150 concrete of characteristic cube strength equal to 15 MPa, minimum cement content of 150 kilograms per cubic metre, and a maximum water:cement ratio of 0.70 to be used for blinding concrete and sidewalks.

7. REINFORCED CONCRETE

9. FOUNDATIONS

- Contractor shall adhere strictly to the geotechnical report. He shall be responsible to determine strata characteristics at the appropriate levels:
- Allowable Bearing capacity = 400 KN/m² .
- Foundations are designed for eight floors .

10. BACK Fill

All back fill material shall conform to specifications and shall be properly tested . No back filling is permitted around .

11. DESIGN LOADING

Basement walls prior to pouring of framing slabs .
Design Live Loads are as follows:
Live Load = 5.0 KN/m²

GENERAL RULES

1. NOTATION

T.B=TOP BARS
B.B=BOTTOM BARS
S= SPACING.
ø,T= DIAMETER FOR STEEL BARS .
@ OR / = INDICATES THAT THE FOLLOWING NUMBER IS THE SPACING BETWEEN BARS.

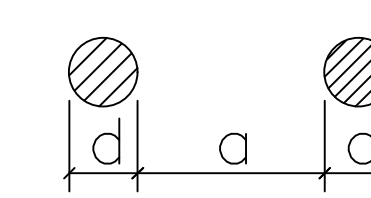
2. COVER

Clear concrete cover to reinforcement shall be :

75mm for concrete below grade for non salty soils
20mm for ribs 40mm for beams 40mm for columns
20mm for slabs and joists.

Reinforcing bars of girder shall be anchored over the center line of column,
And reinforcing bars of sub-beam shall be anchored over the center line of girder.

3. Min. Bar Spacing



Unless otherwise shown below, sub-beam and cantilever beam shall be conformed

Bar spacing "a" shall be not less than the greatest in the following three cases:

- 1) 25 mm
- 2) 1.5 d
- 3) 1.25 times the max. size of coarse aggregate.

Standerd Hook Details and Bar Bends

End position		Secondary Steel	Main Steel	Application
180°		D	4d	16mm dia. bar and larger
		1e	12d	
135°		D	4d	13mm dia. bar and smaller
		1e	12d	
90°		D	4d	T- and L-shape stirrups
		1e	12d	
135°		D	4d	90° 135°
		1e	8d	
90°		1'e	10d	Spacer bar

Intermediate position		Secondary Steel	Main Steel	Application
90°		D	3d	Hoop and stirrup
			and over	
or		D	4d	16mm dia. bar and smaller
			and over	
45°		D	5d	Main bars less than 30mm in column and girder
			and over	
		D	8d	30mm dia bar and over in column and girder



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DRAWING TITLE :

Design Requirements

Supervisor :

Eng- shadi qumsiah

Designed by :

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moatasem zedat
mohamad salameen
nadeen melhem*

SCALE	No. of DRAW
1/200	500



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DRAWING TITLE :

Columns Center Plan

*Eng- shadi qumsiah
Designed by :*

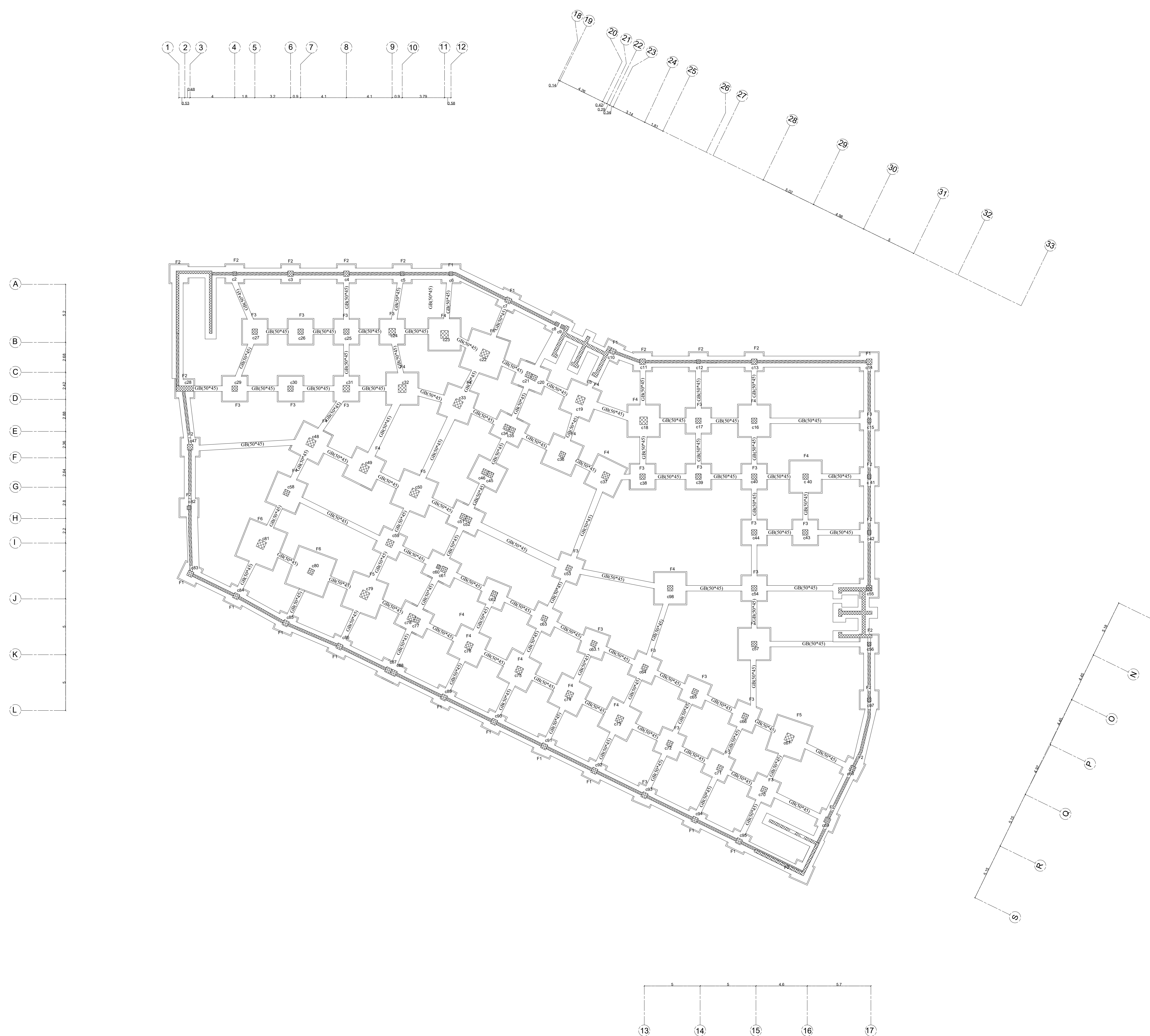
*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

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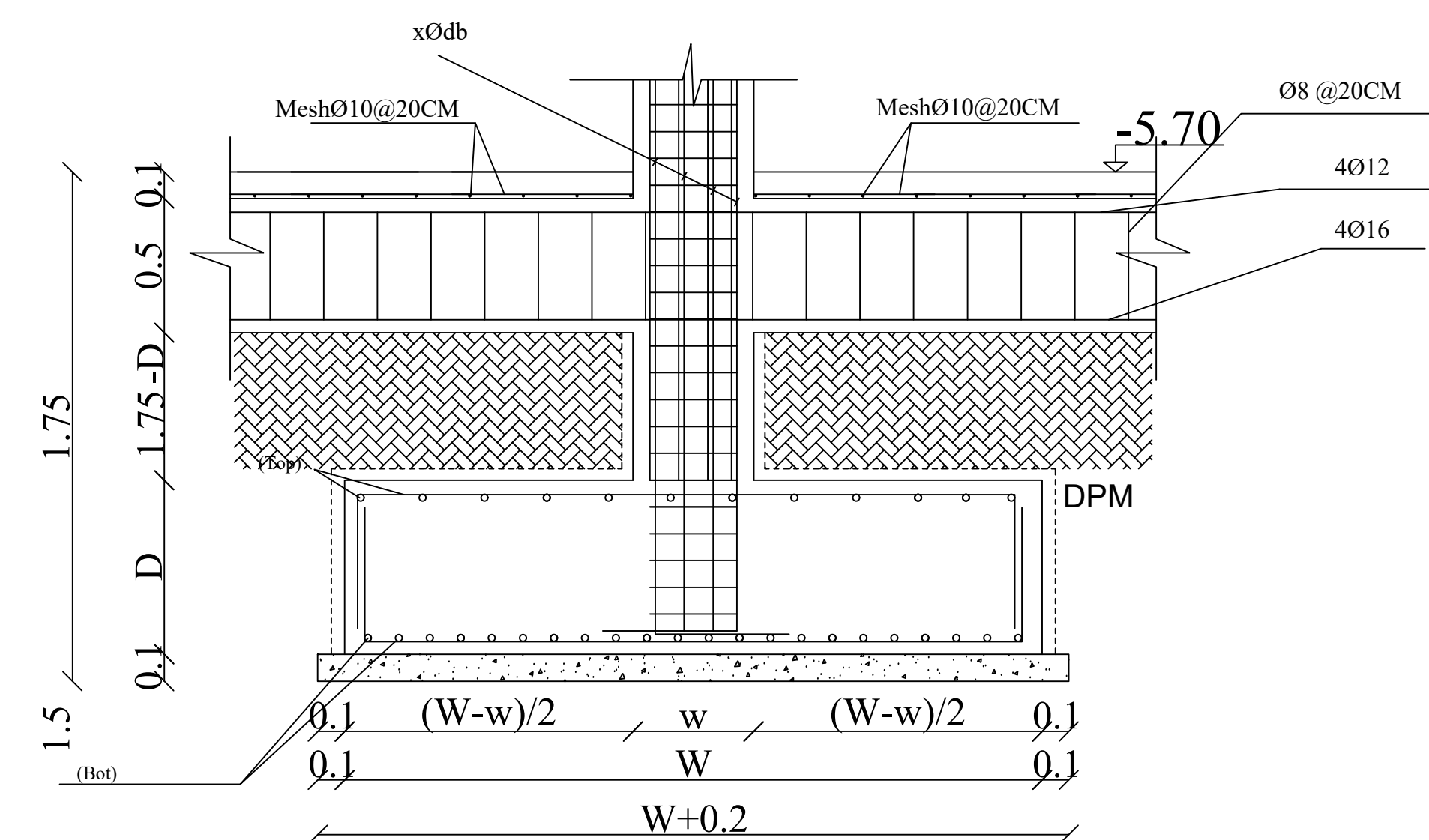
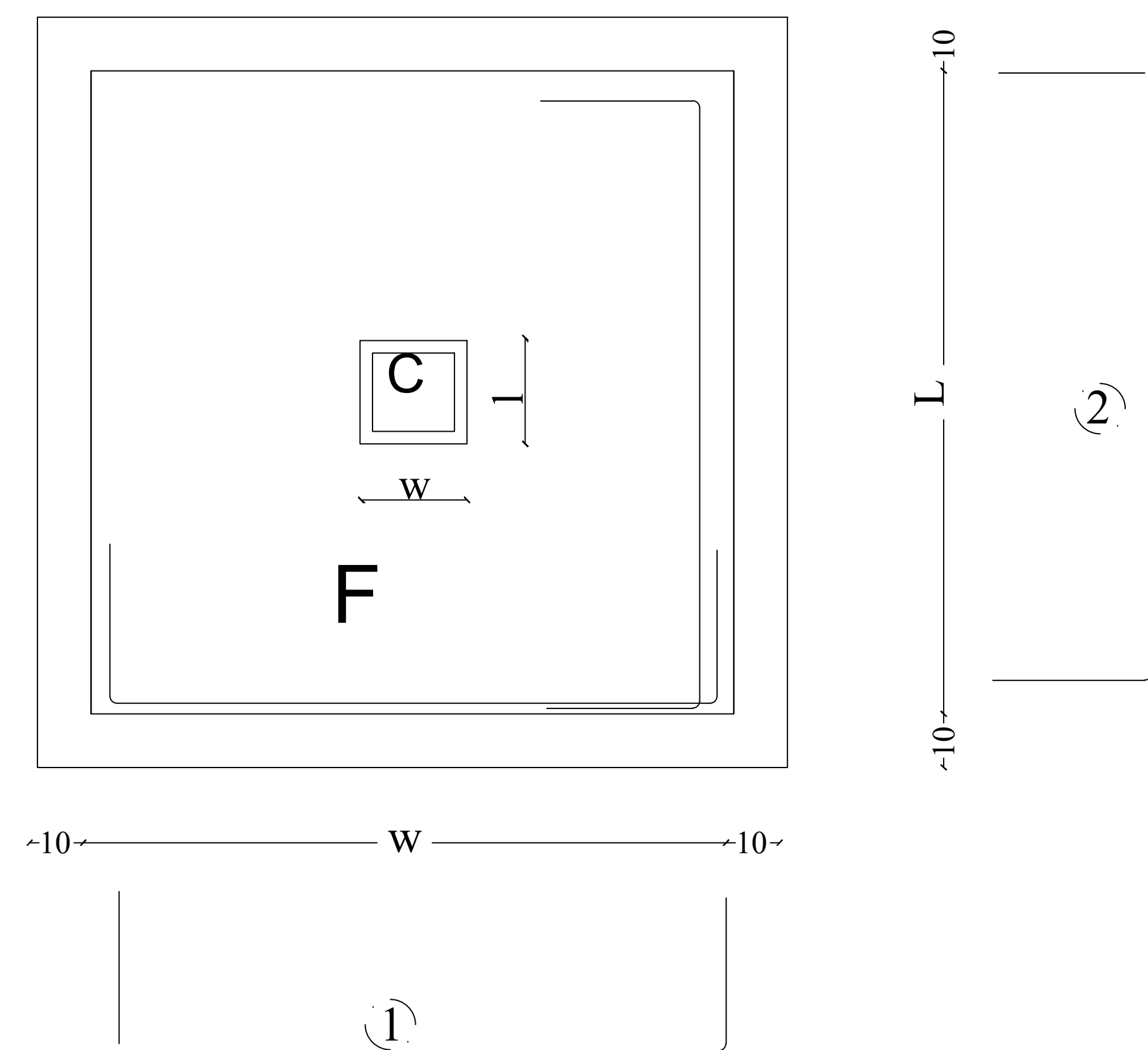
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501



Reinforcement of Isolated Footing

Footing	F(cm) W&L	C(cm) w&l	D(cm)	Bot. Bar(cm) (1)	Bot. Bar(cm) (2)
F1	160*160	35*35	45	$35 \quad 150 \quad 35$	$35 \quad 150 \quad 35$
F2	220*220	50*50	55	$35 \quad 210 \quad 35$	$35 \quad 210 \quad 35$
F3	280*280	50*50	65	$35 \quad 270 \quad 35$	$35 \quad 270 \quad 35$
F4	320*320	60*60	80	$35 \quad 310 \quad 35$	$35 \quad 310 \quad 35$
F5	350*350	70*70	90	$35 \quad 340 \quad 35$	$35 \quad 340 \quad 35$



Section in footing

SCALE 1:20



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DRAWING TITLE :
Isolated footing table

Supervisor :

Eng- shadi qumsiah

Designed by :

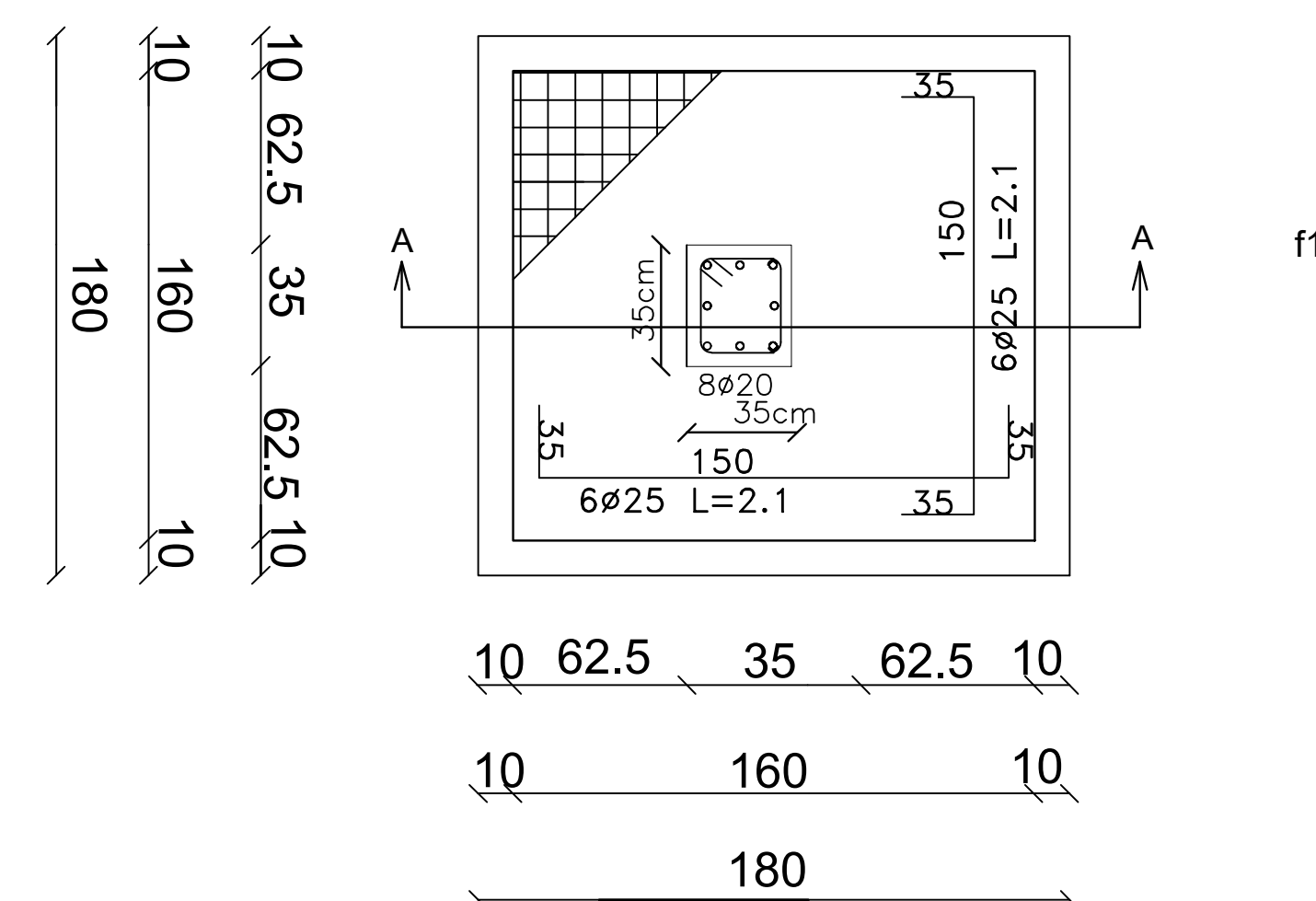
*shaimaa mosleh
moatasem zedat
mohamad salameen
nadeen melhem*

No. of DRAW

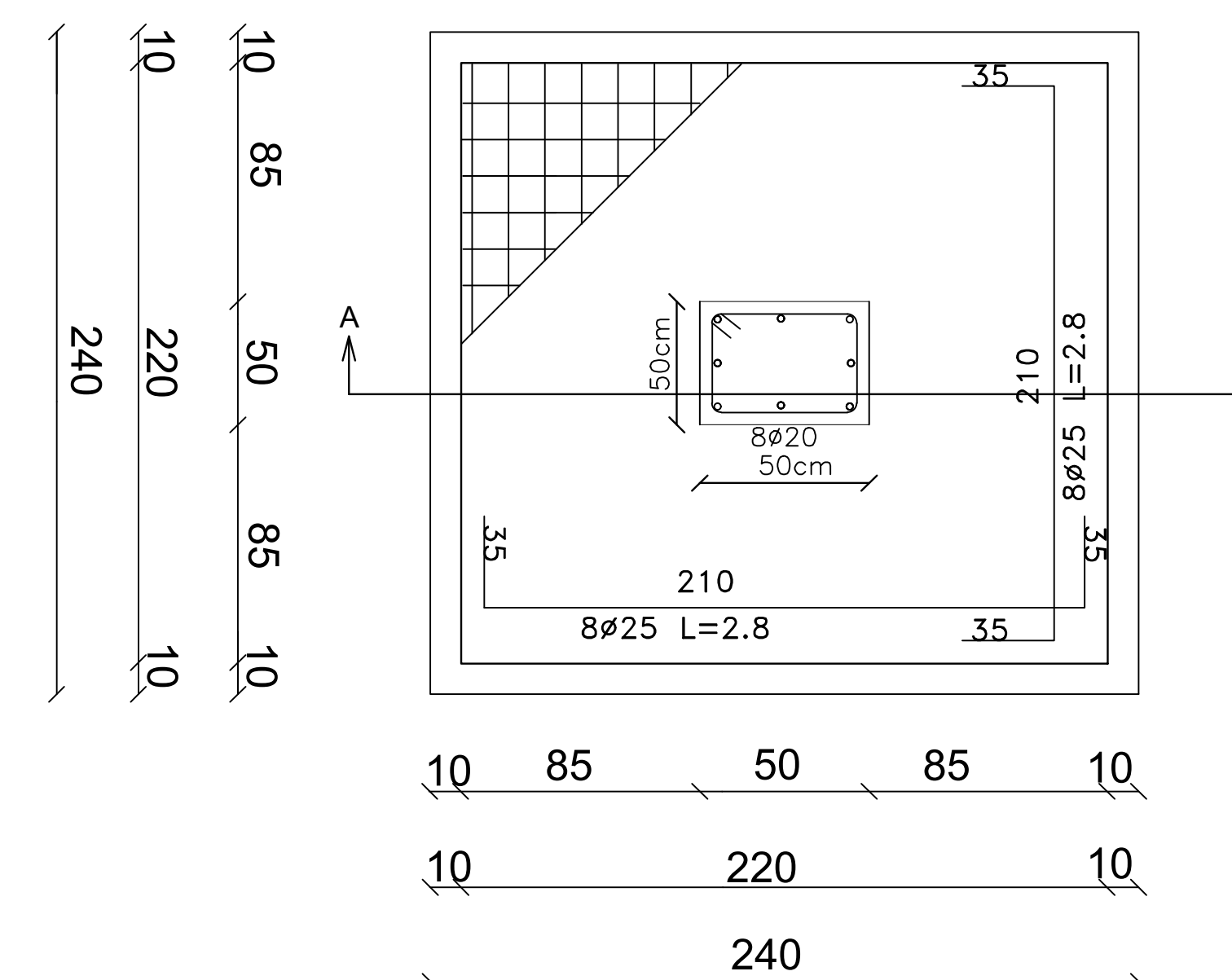
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Isolated Foundation details

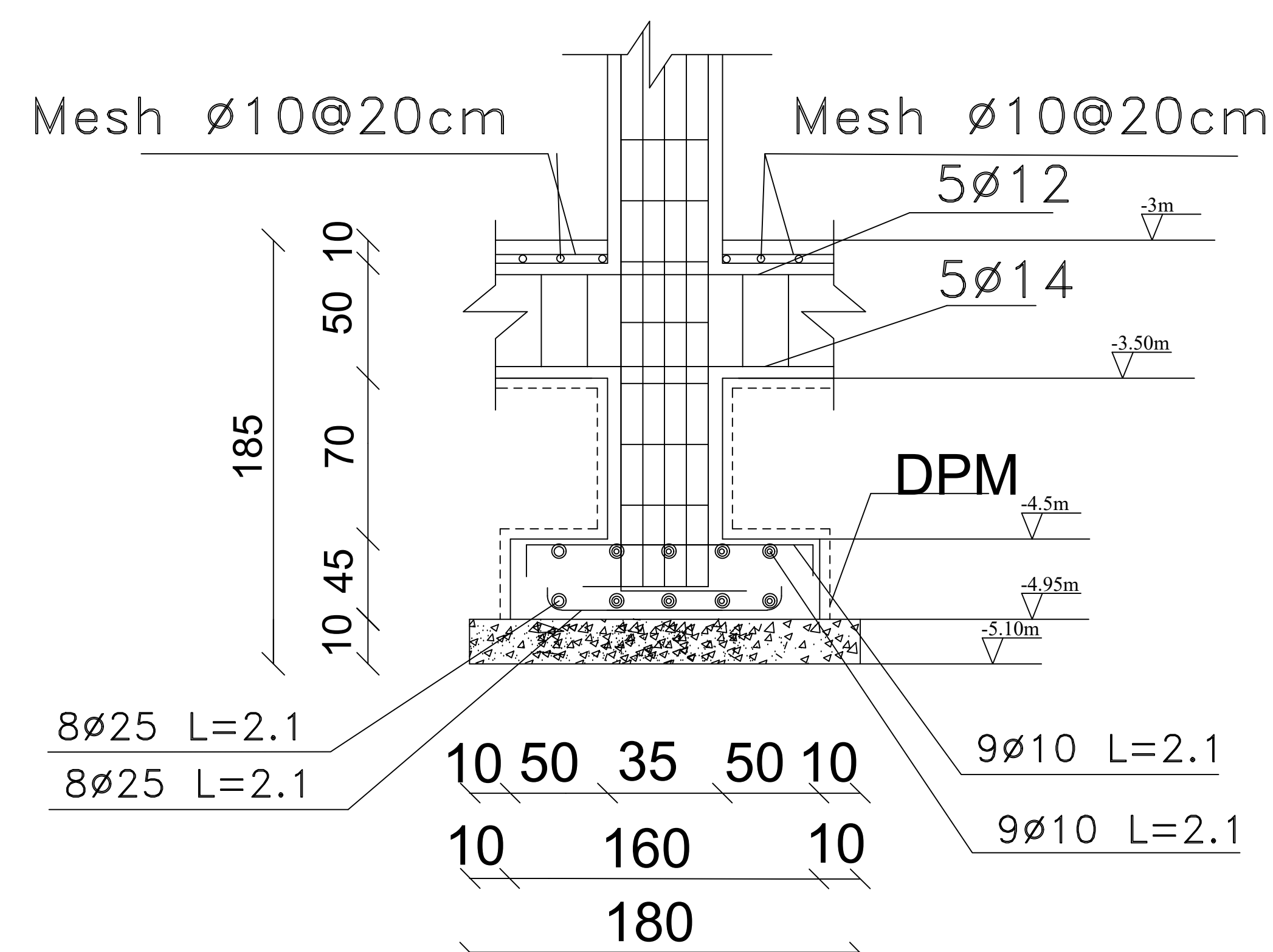
Foundation - F1



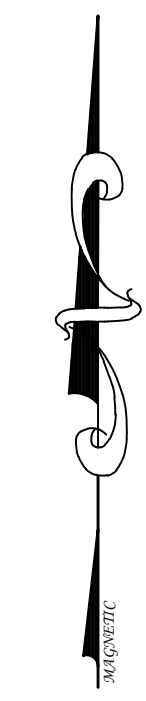
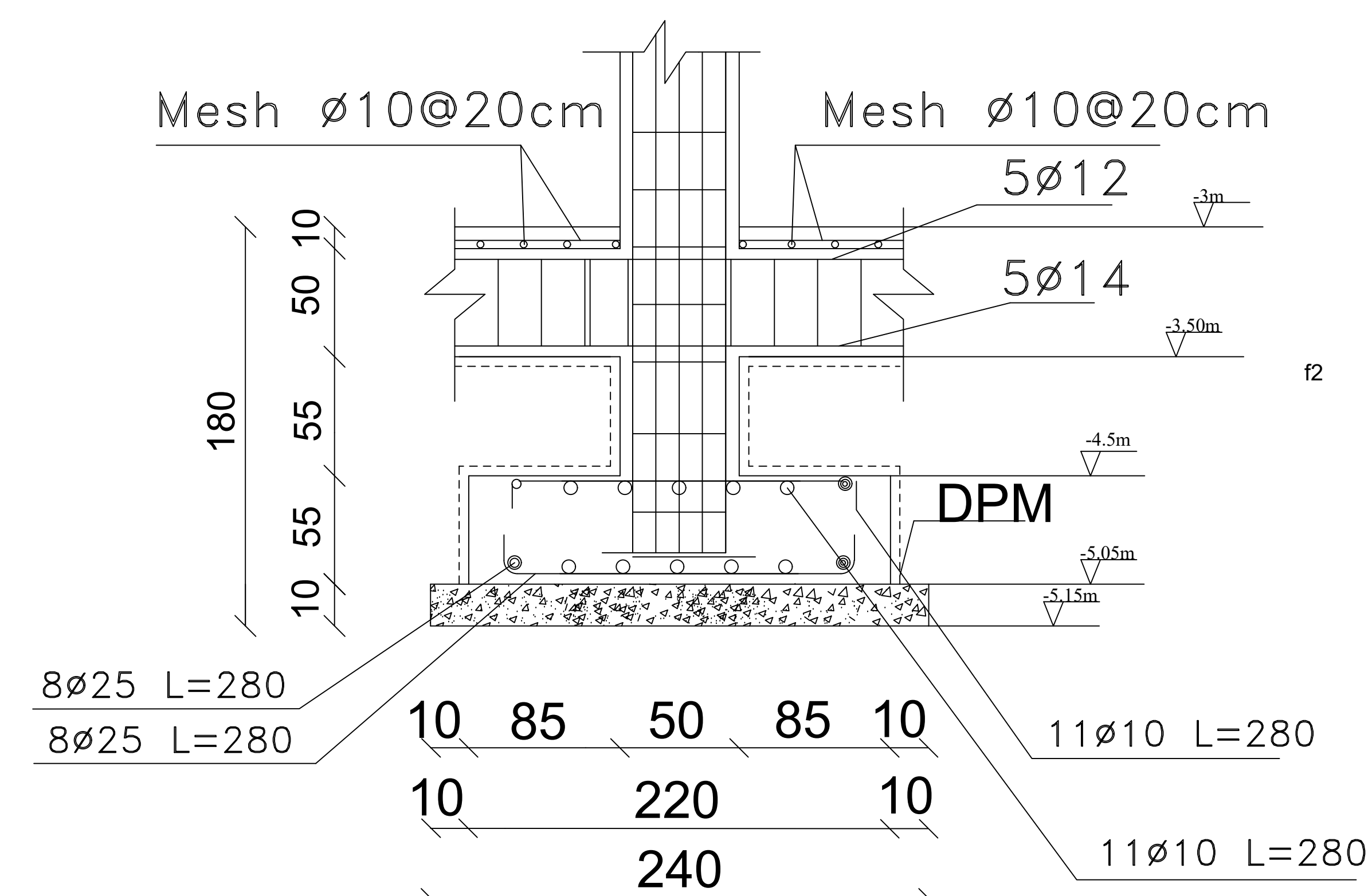
Foundation - F 2



Section A-A



Section A-A



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DRAWING TITLE :
Isolated Footing Details

Supervisor :

Eng- shadi qumsiah

Designed by :

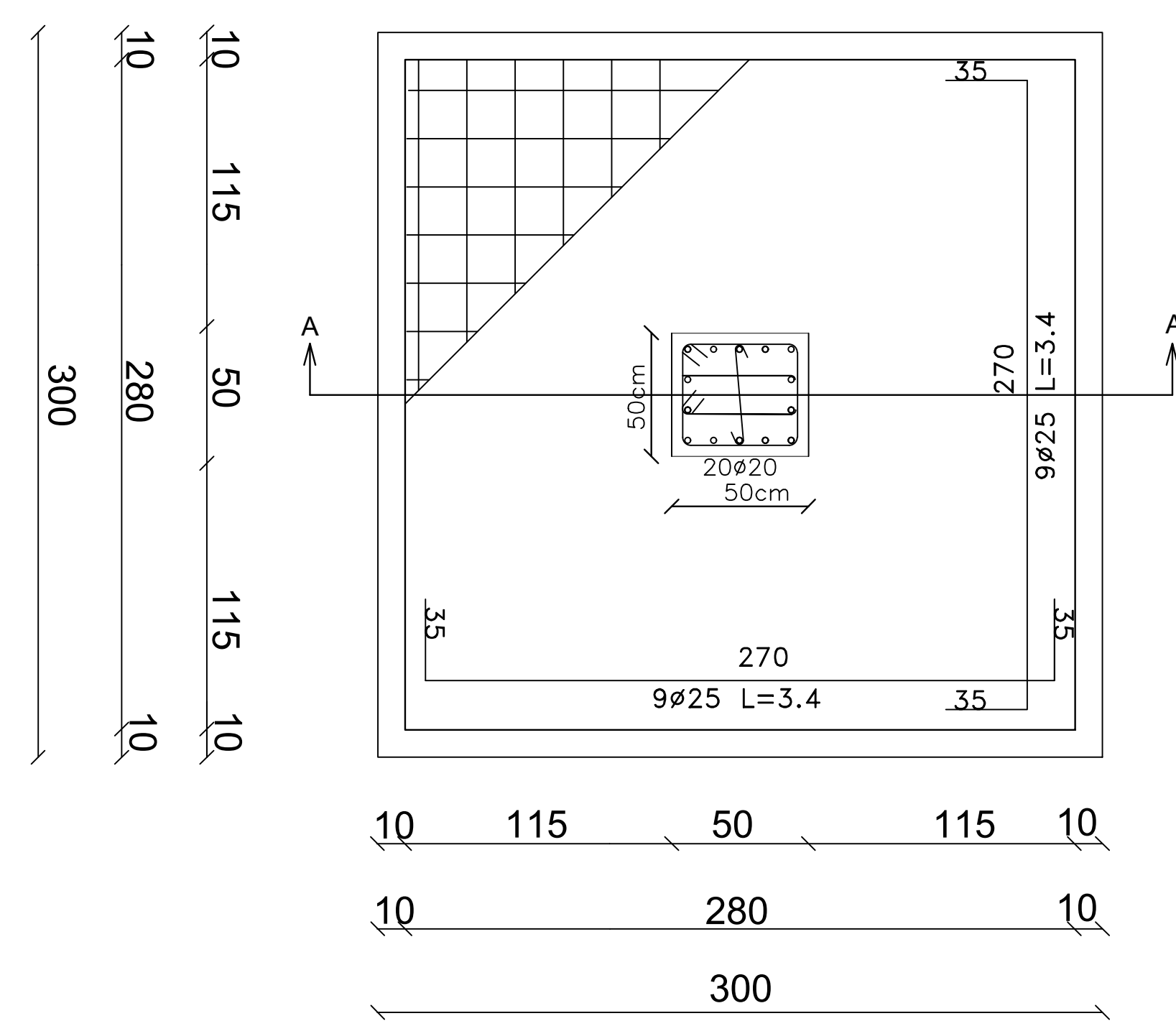
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moatasem zedat
mohamad salameen
nadeen melhem

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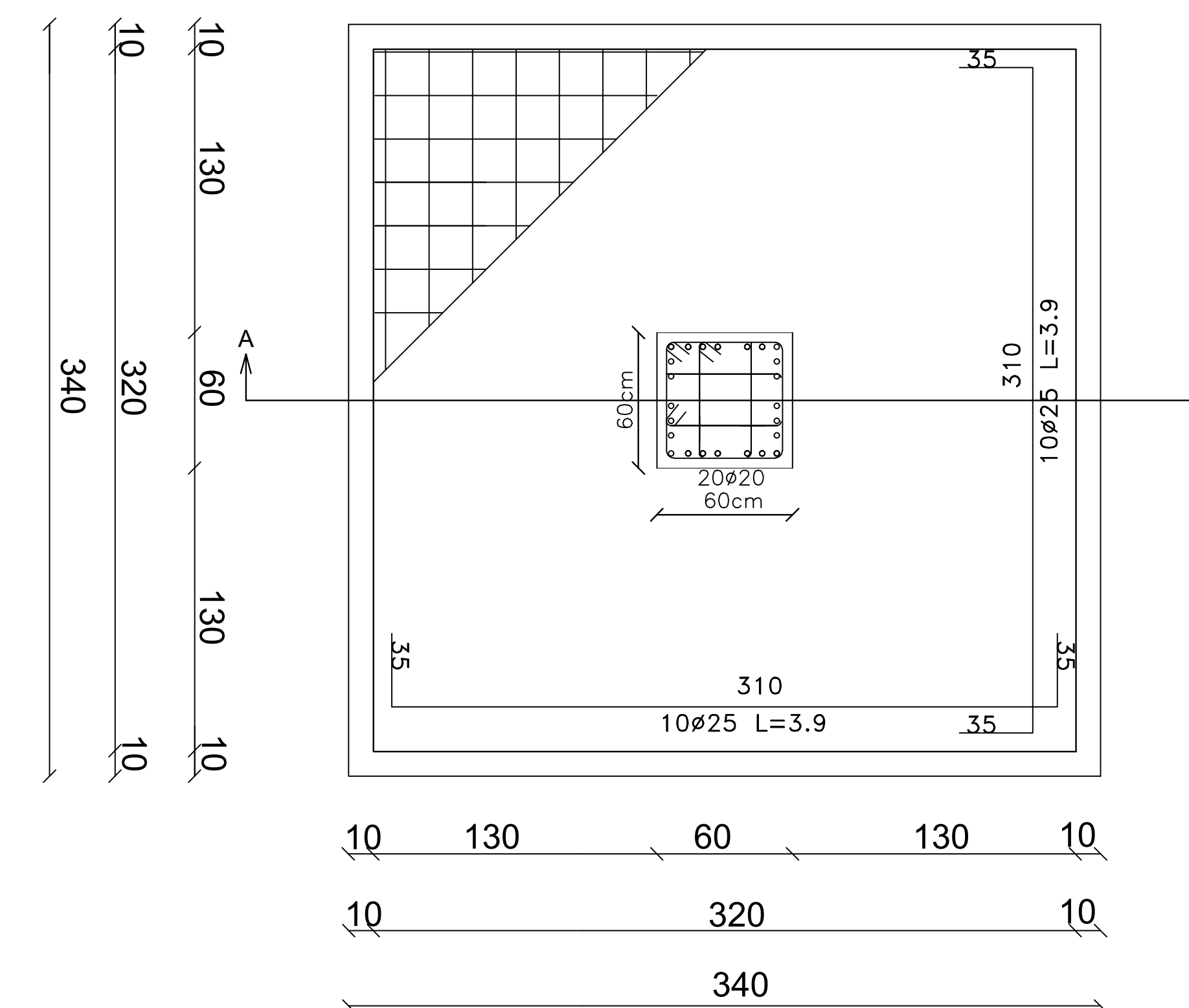
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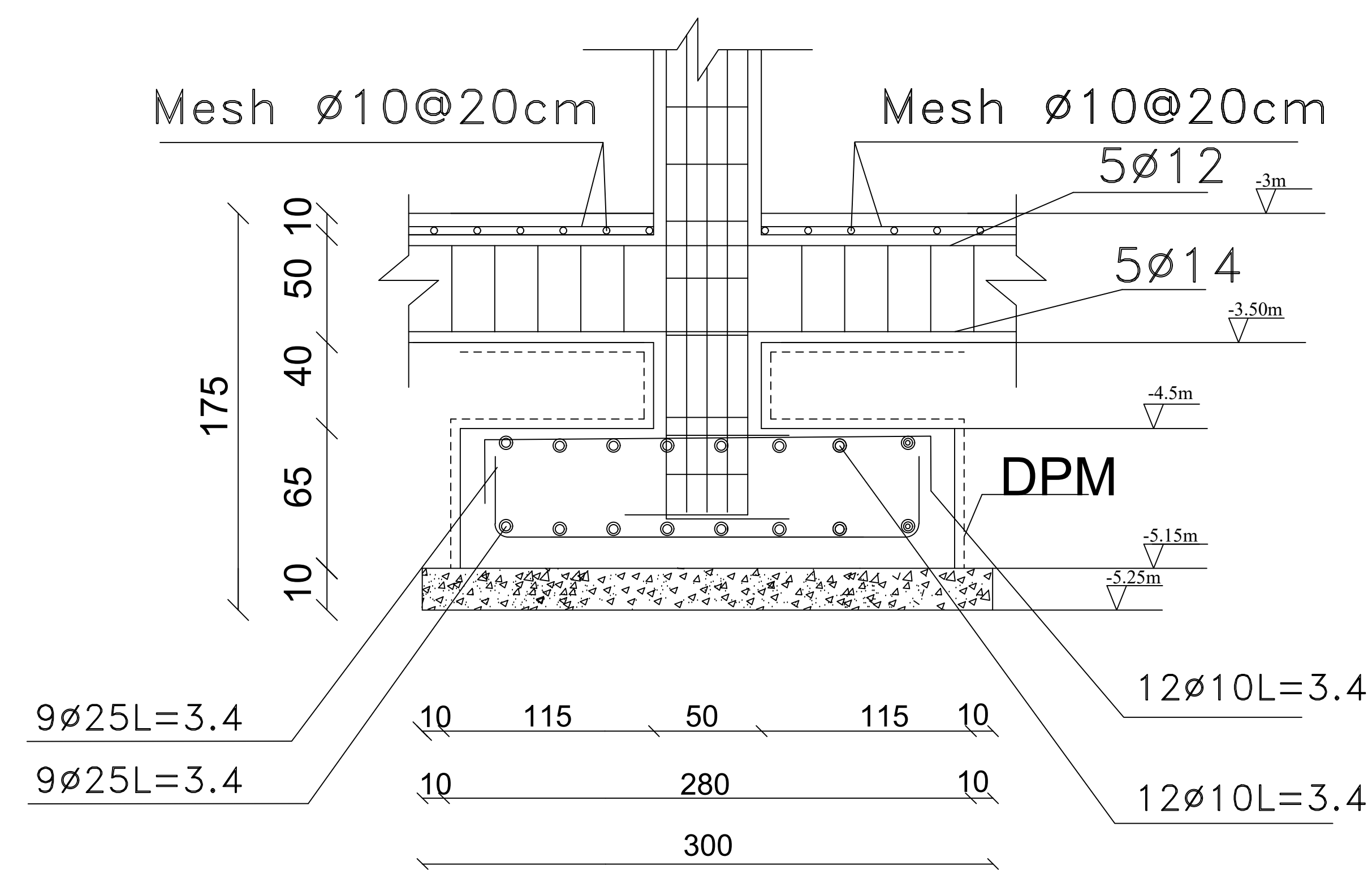
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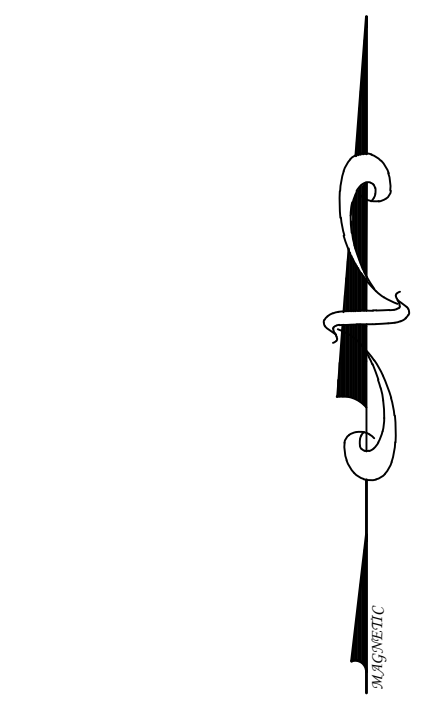
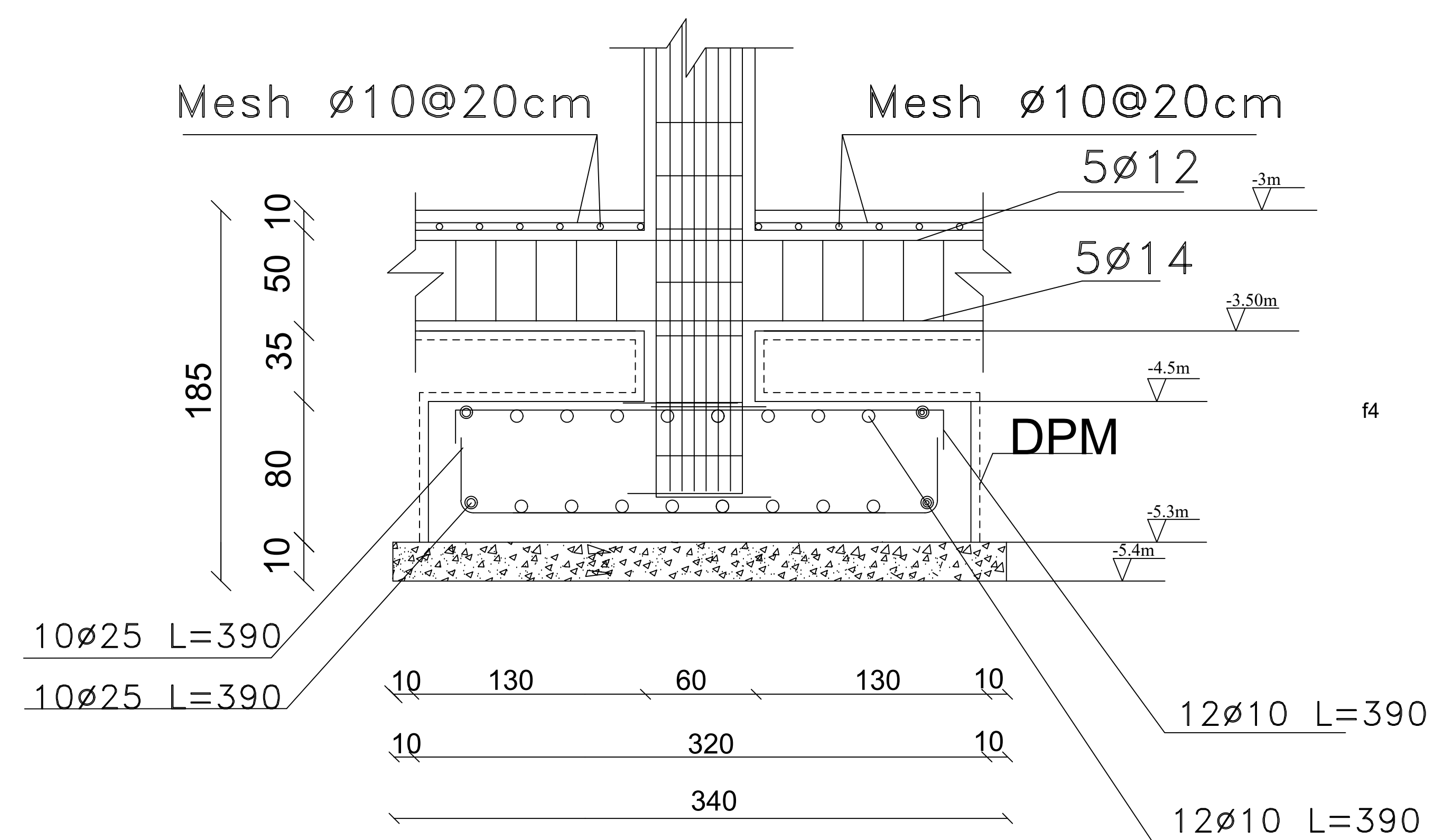
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Section A-A



Section A-A



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Isolated Footing Details

Supervisor :
Eng- shadi qumsiah
Designed by :

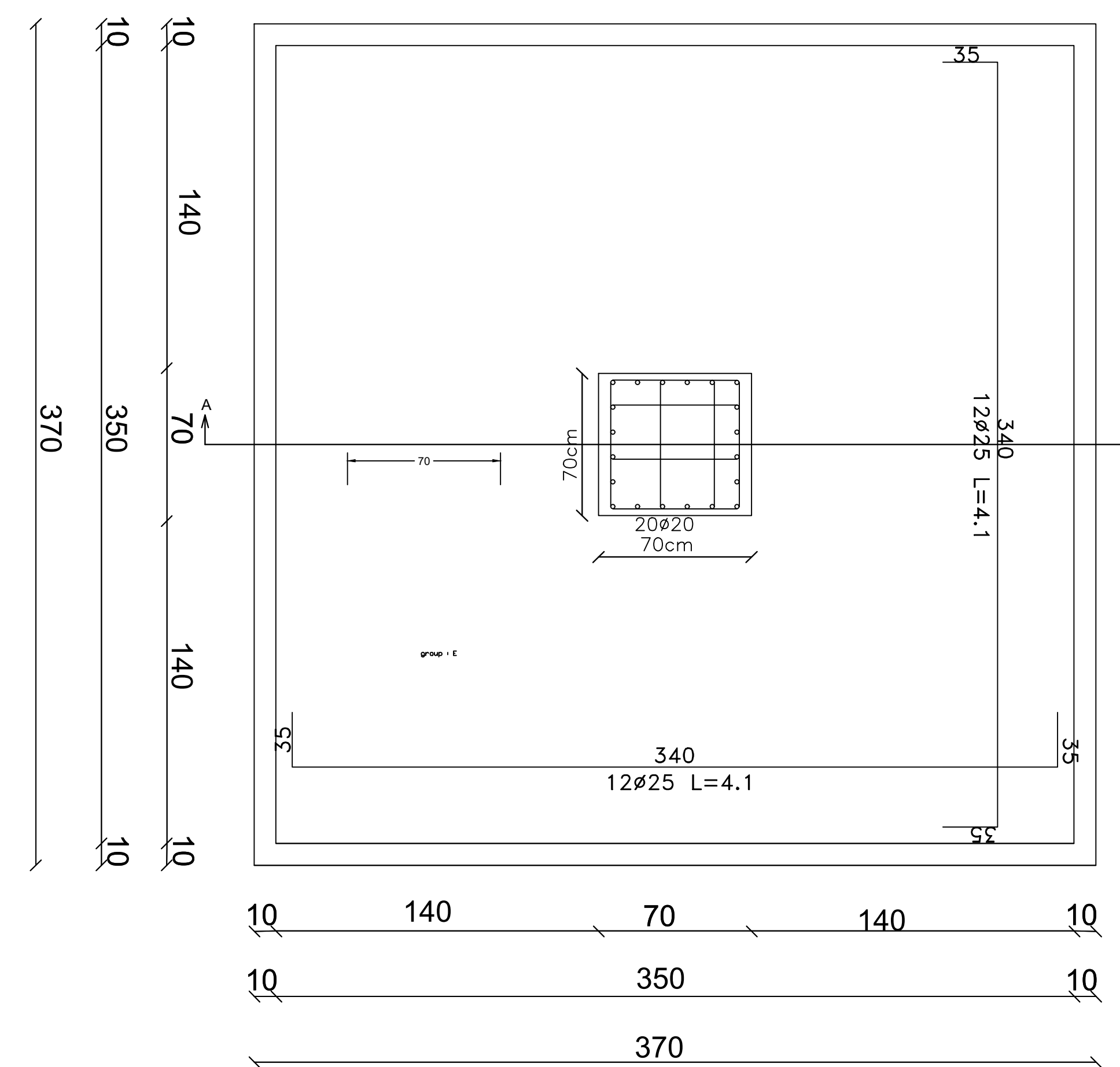
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nadeen melhem

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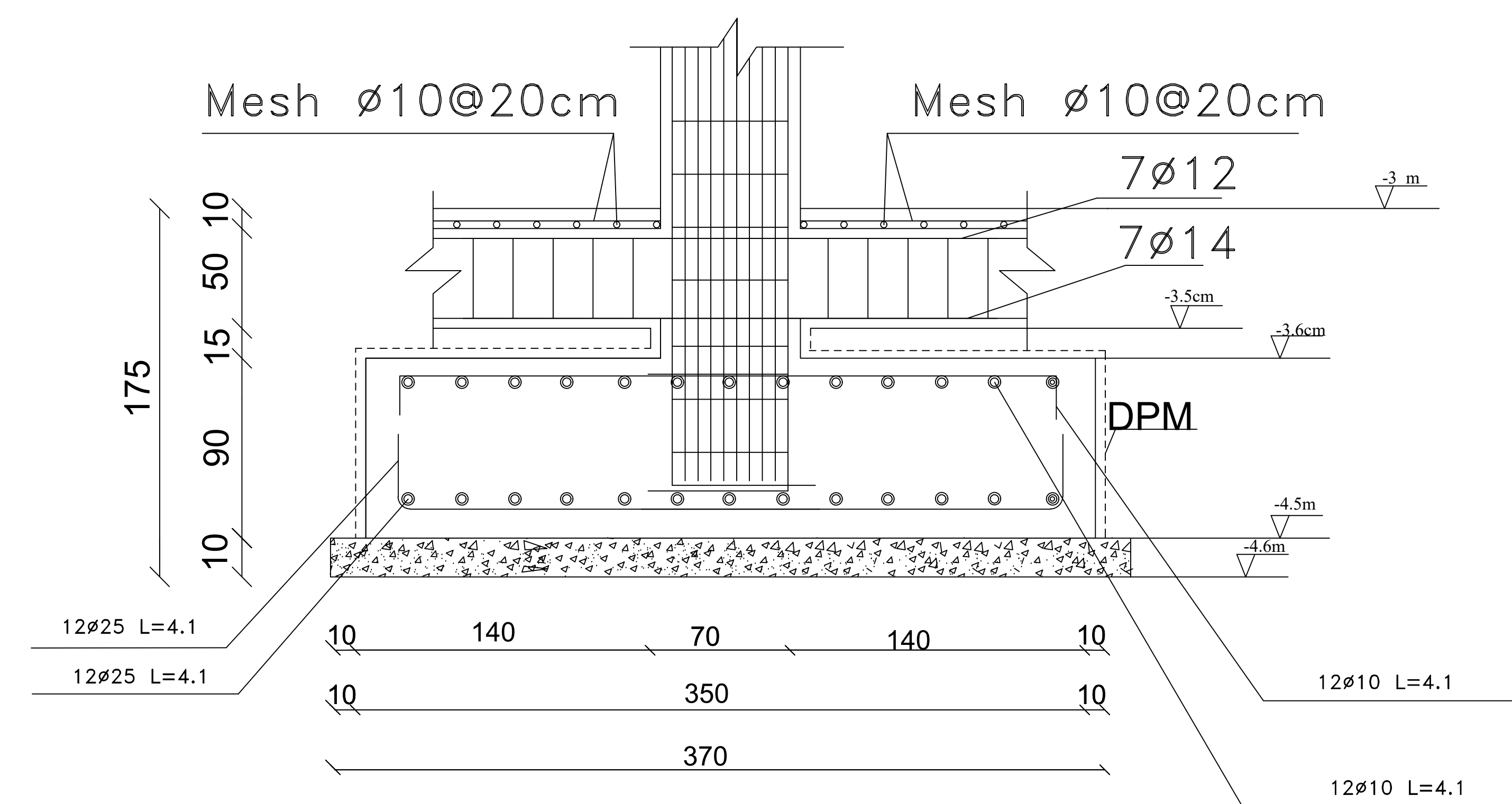
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Isolated Foundation details

Foundation - F 5



Section A-A



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DRAWING TITLE :
Isolated Footing Details

Supervisor :

Eng- shadi qumsiah

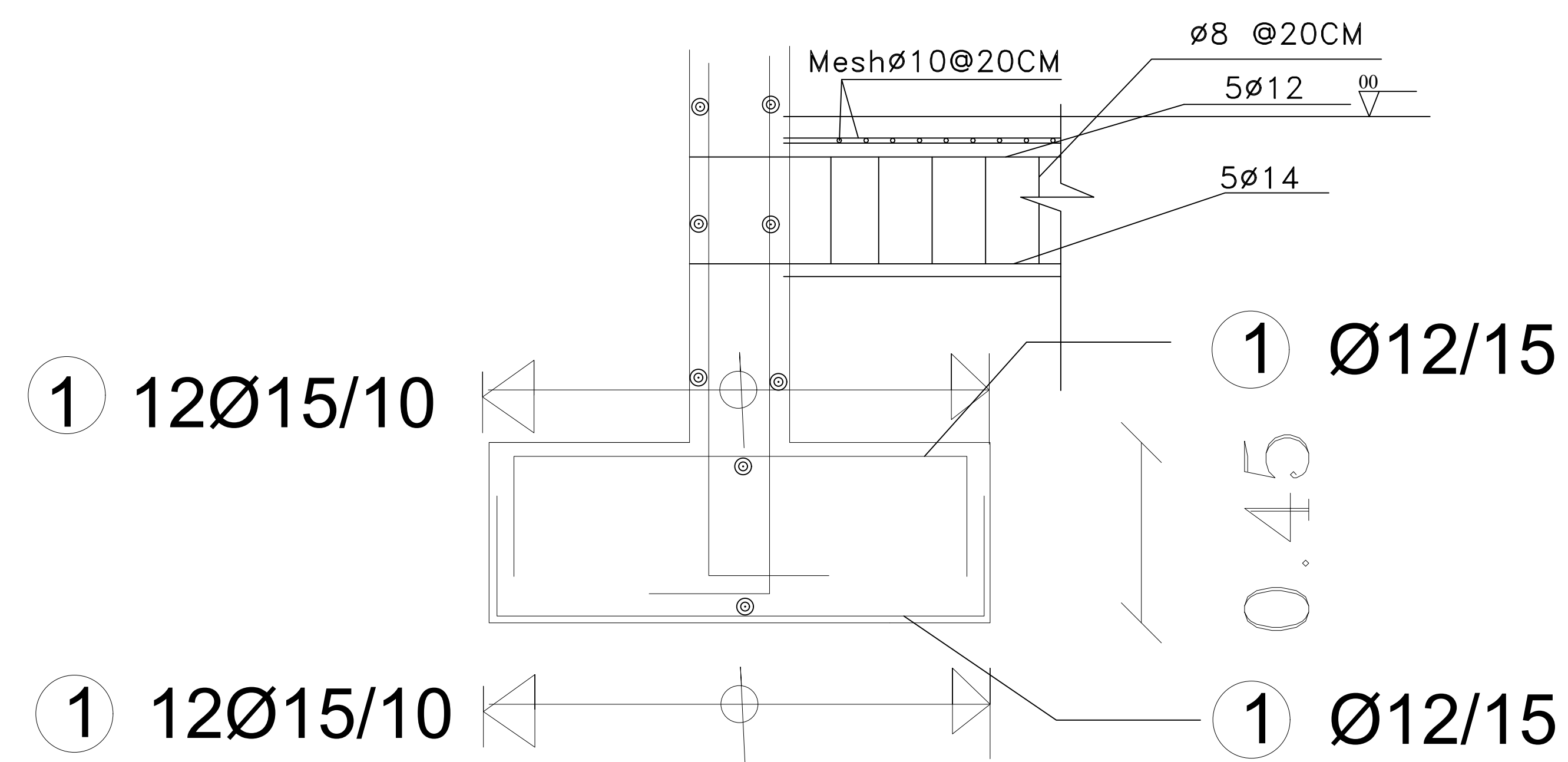
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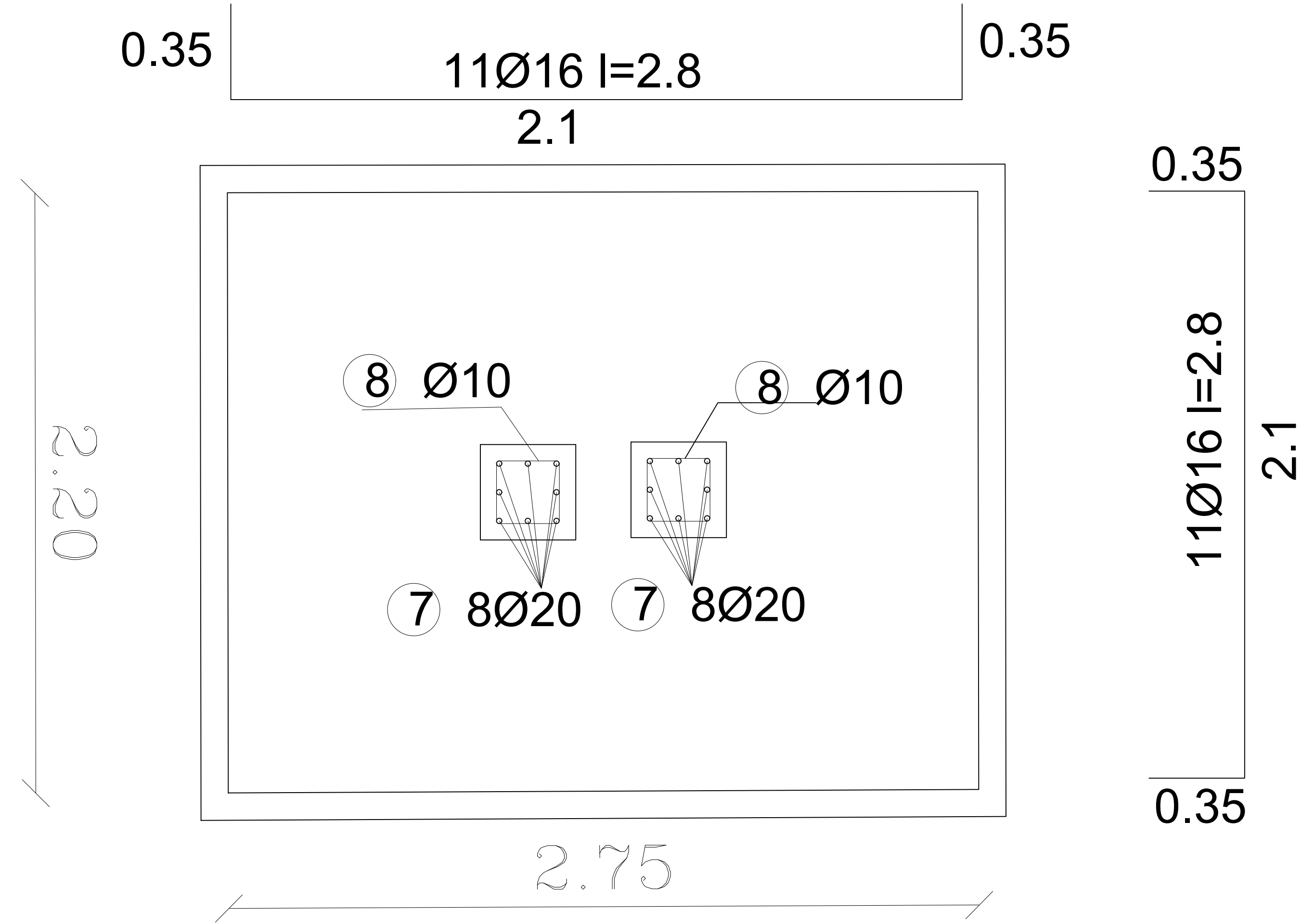
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strip footing

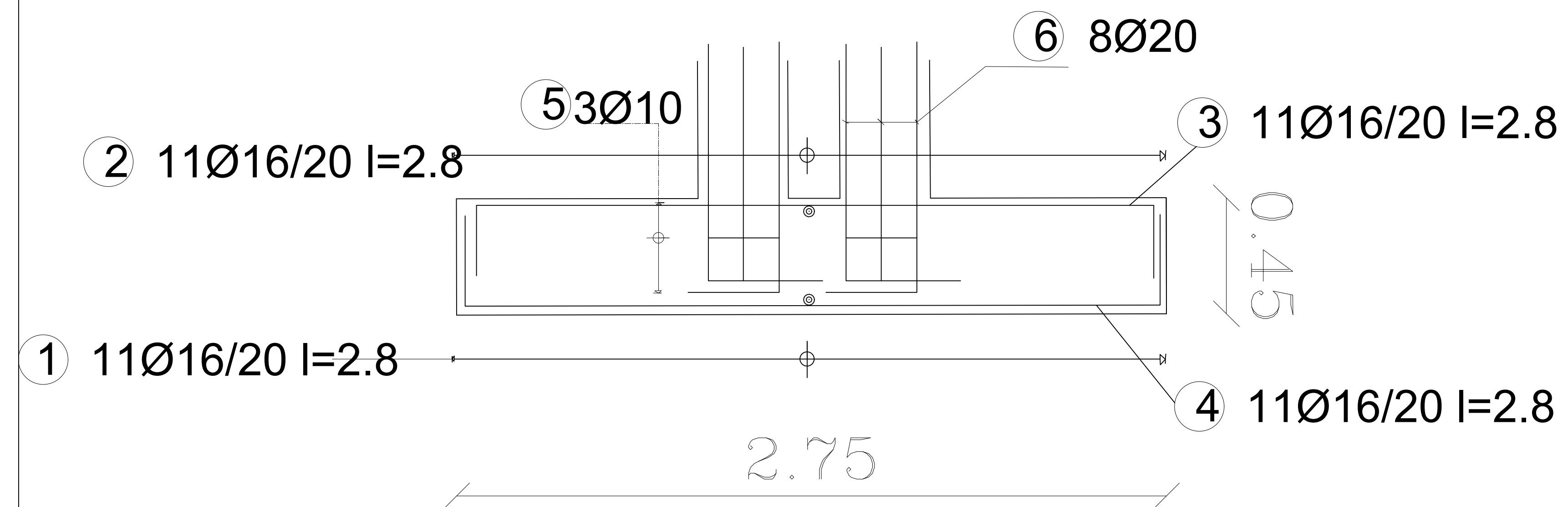


strip footing

combined1



Plan



Section A-A



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DRAWING TITLE :

Combined & Strip
Footing Details

Supervisor :

Eng- shadi qumsiah

Designed by :

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moatasem zedat
mohamad salameen
nadeen melhem

No. of DRAW

506

Column's Design Section

Floor	GROUP A	GROUP B	GROUP C	GROUP D	GROUP E
	(C 1 , 42 - 41 , 56, 60 , 15 , 2 , 9 , 8 , 12 , 97 , 5 , 82 ,)	(3 , 4 , 9 , 45 , 52, 61 , 38 , 63 , 34 , 65, 54 , 64 , 63 , 44 , 62 , 20 , 77 , 54 , 40 , 26 , 35 , 25 , 17 , 72 , 43 , 66)	34 , 65 , 54 , 64 , 63 , 44 , 62 , 20 , 77 , 54 , 40 , 26 , 35 , 25 , 17 , 72 , 43 , 66)	(C 59 , 31 , 74 , 75 , 78, 57, 37 ,)	(C 33 , 48, 32 , 49, 41, 19, 67 , 79 C 22 , 81)
Basement 1 Floor					
Basement 2 Floor					
Ground Floor					
First Floor					
Second Floor					
Third Floor					
4TH Floor					
5 TH Floor					



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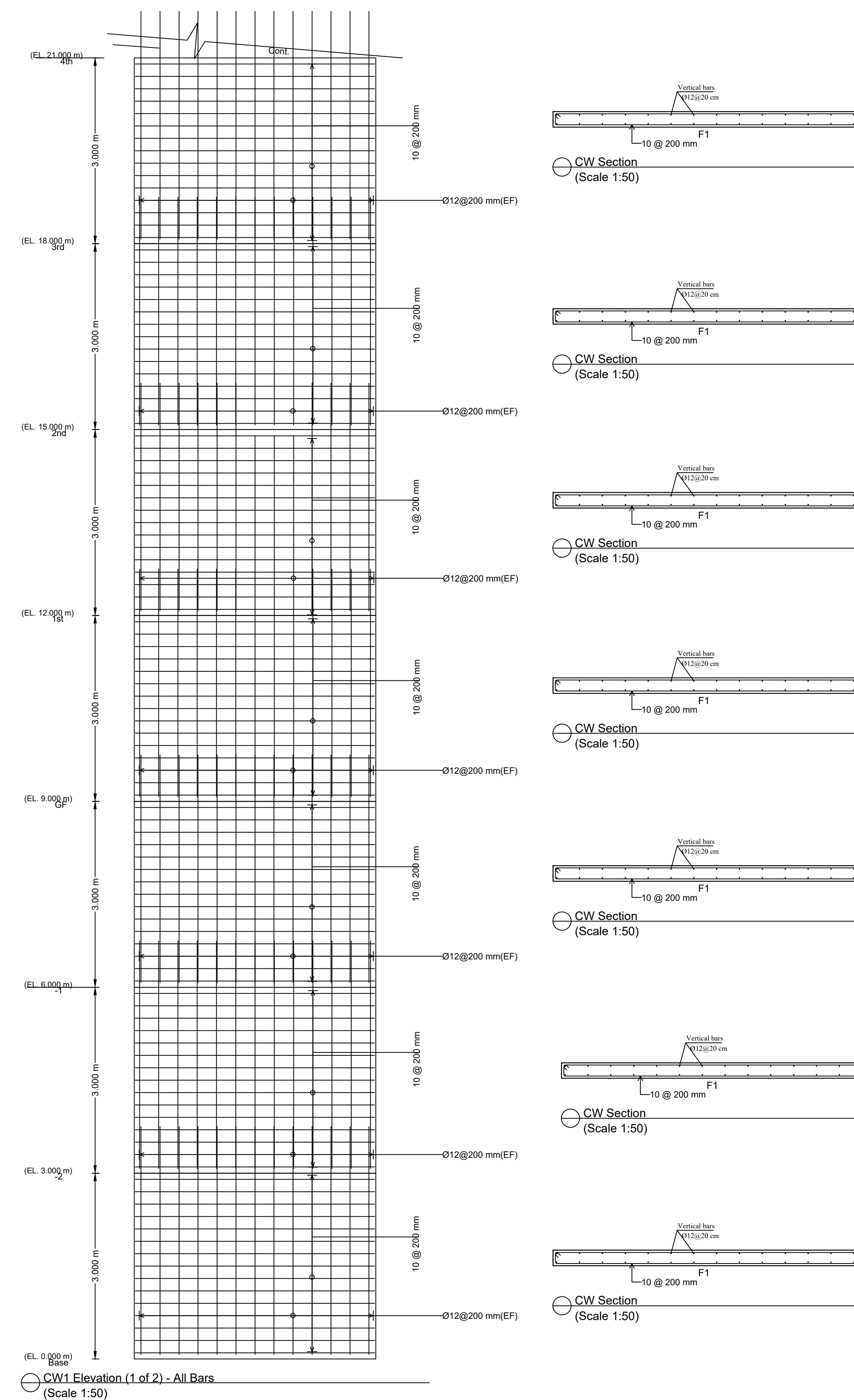
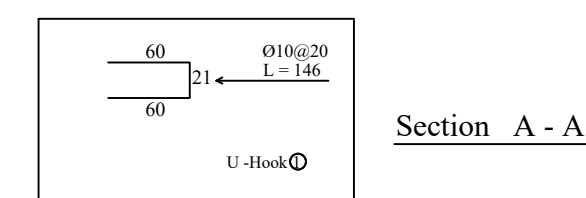
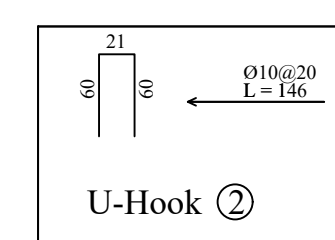
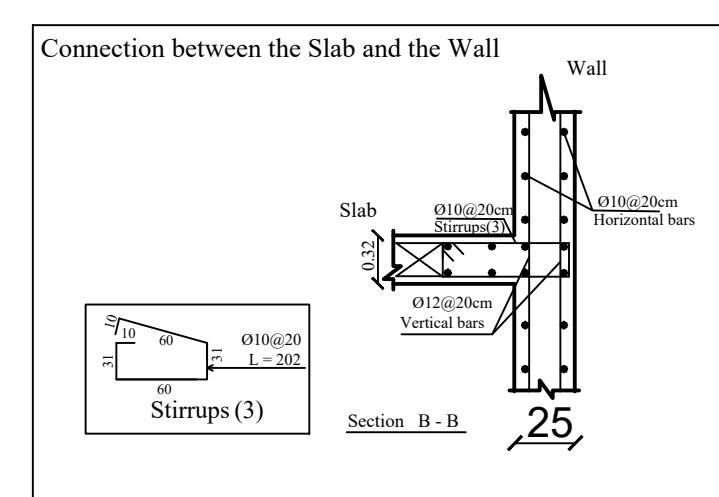
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DRAWING TITLE :
Isolated Footing Details

Supervisor :
Eng- shadi gumsiah
Designed by :
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mohamad salameen
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No. of DRAW
507

typical section



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DRAWING TITLE :

Shear Walls Details

Supervisor :

Eng- shadi gumsiah

Designed by :

shaimaa salah
moatasem zedat
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nadeen melhem

No. of DRAW

509



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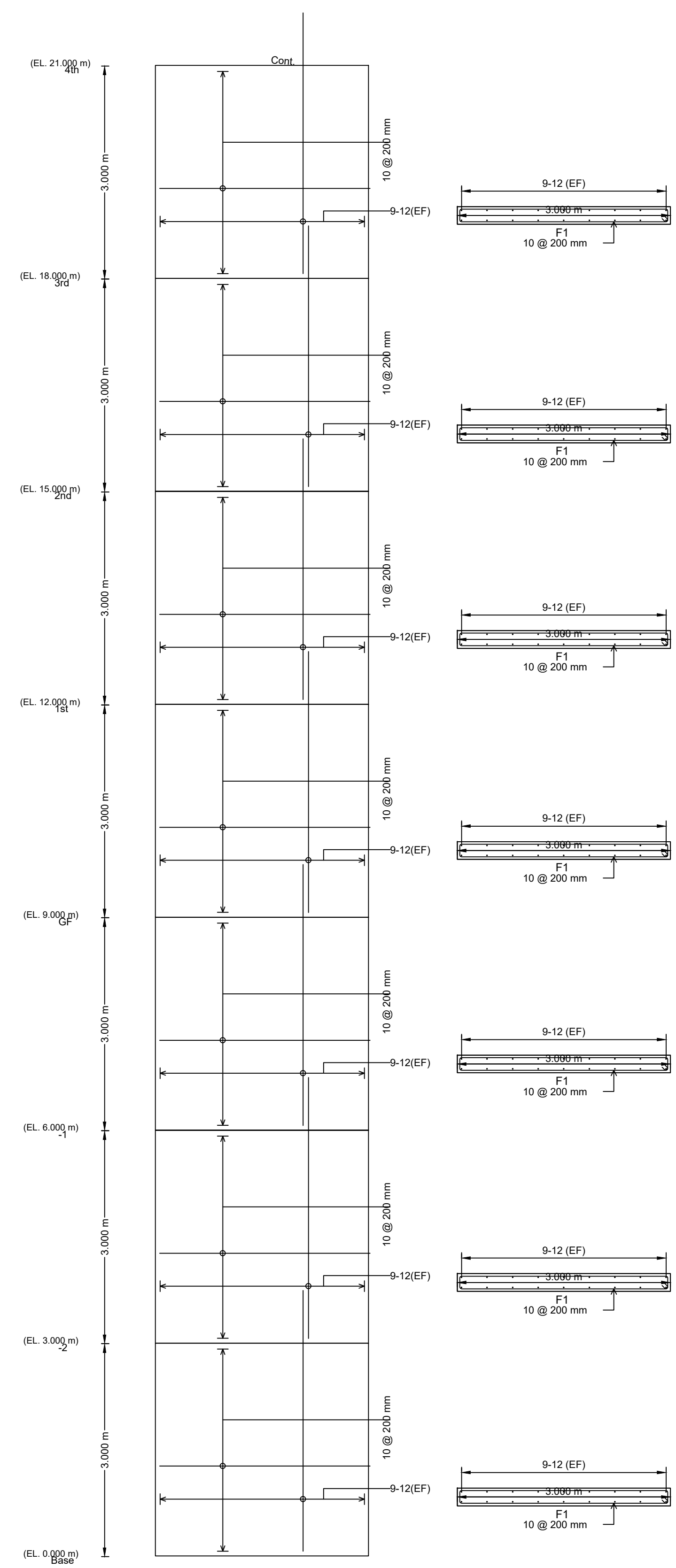
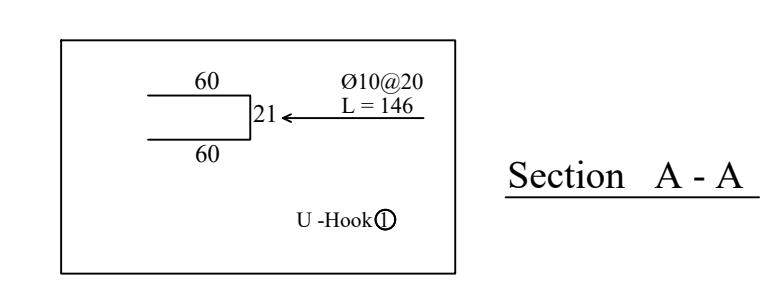
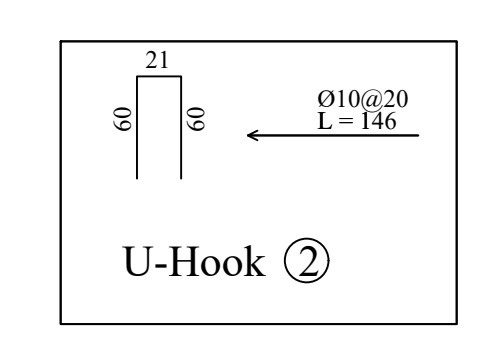
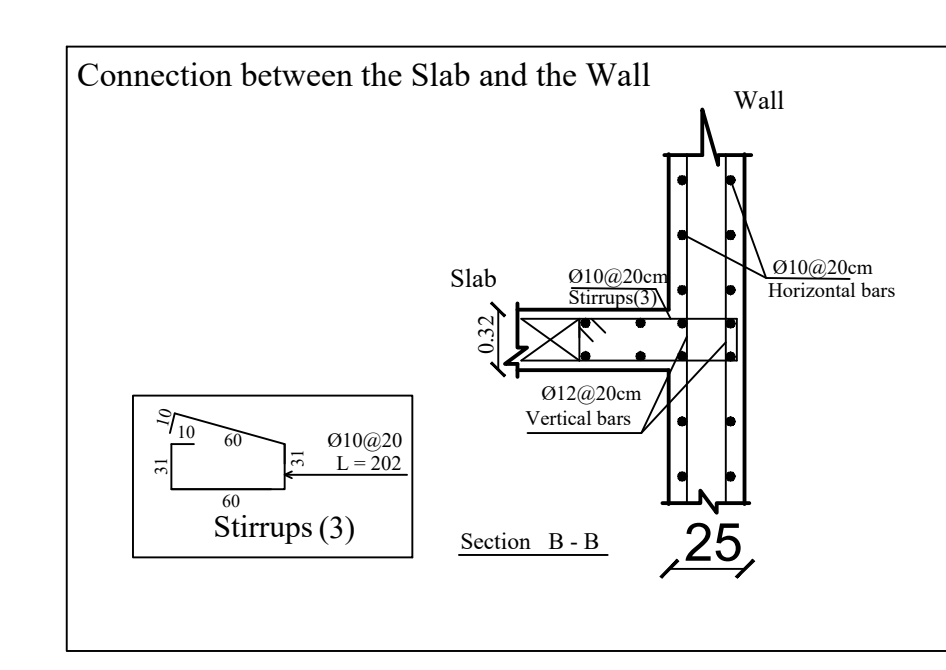
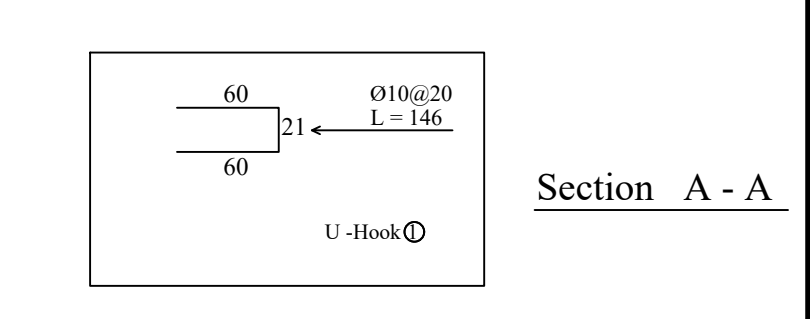
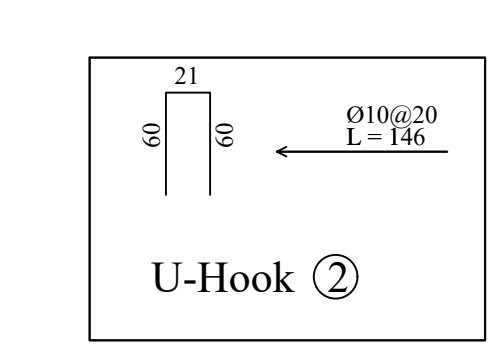
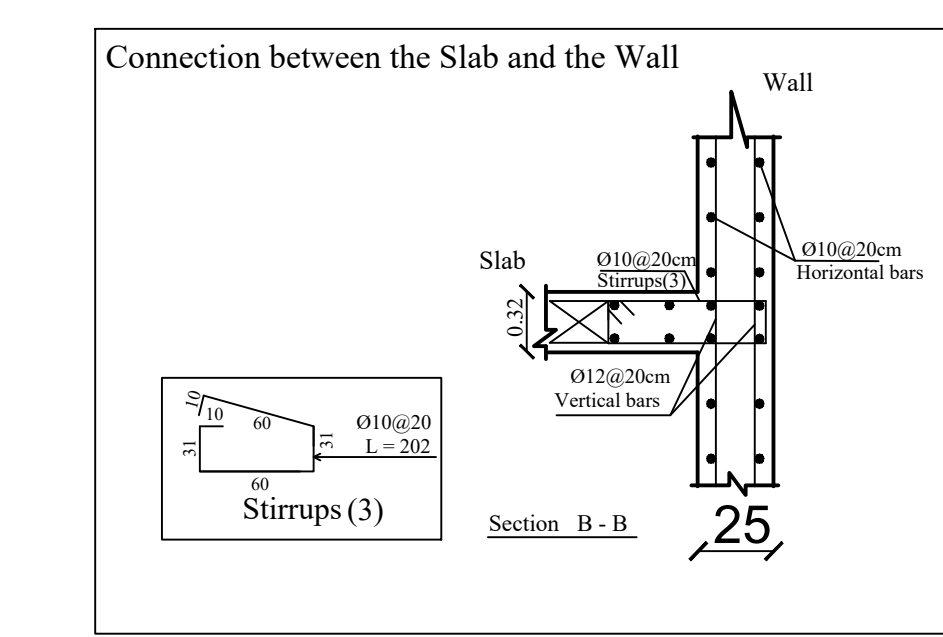
DRAWING TITLE :
Shear Walls Details

Supervisor :
Eng- shadi gumsiah

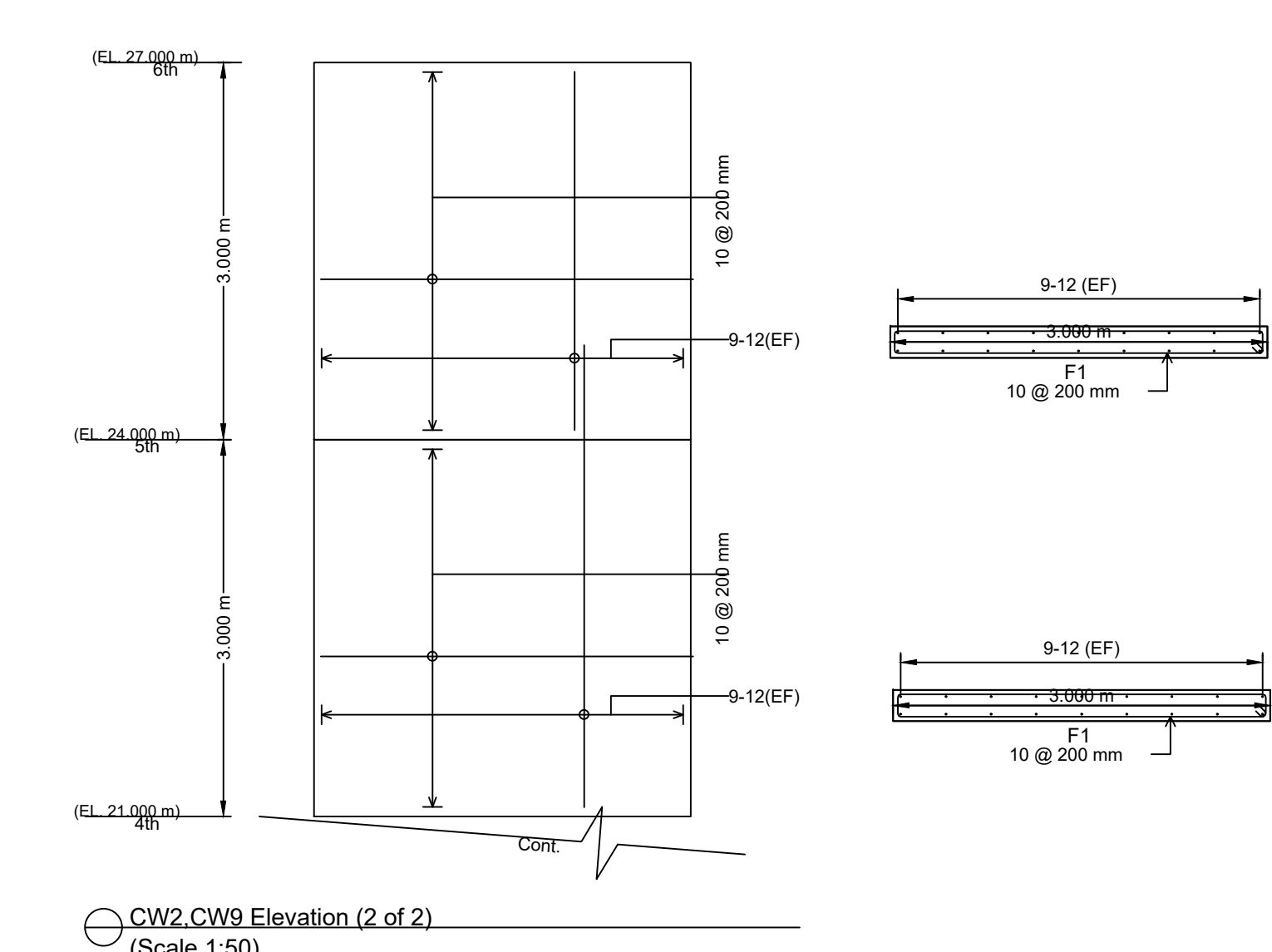
Designed by :
shaimaa salah
moatsem zedat
mohamad salameen
nadeen melhem

No. of DRAW

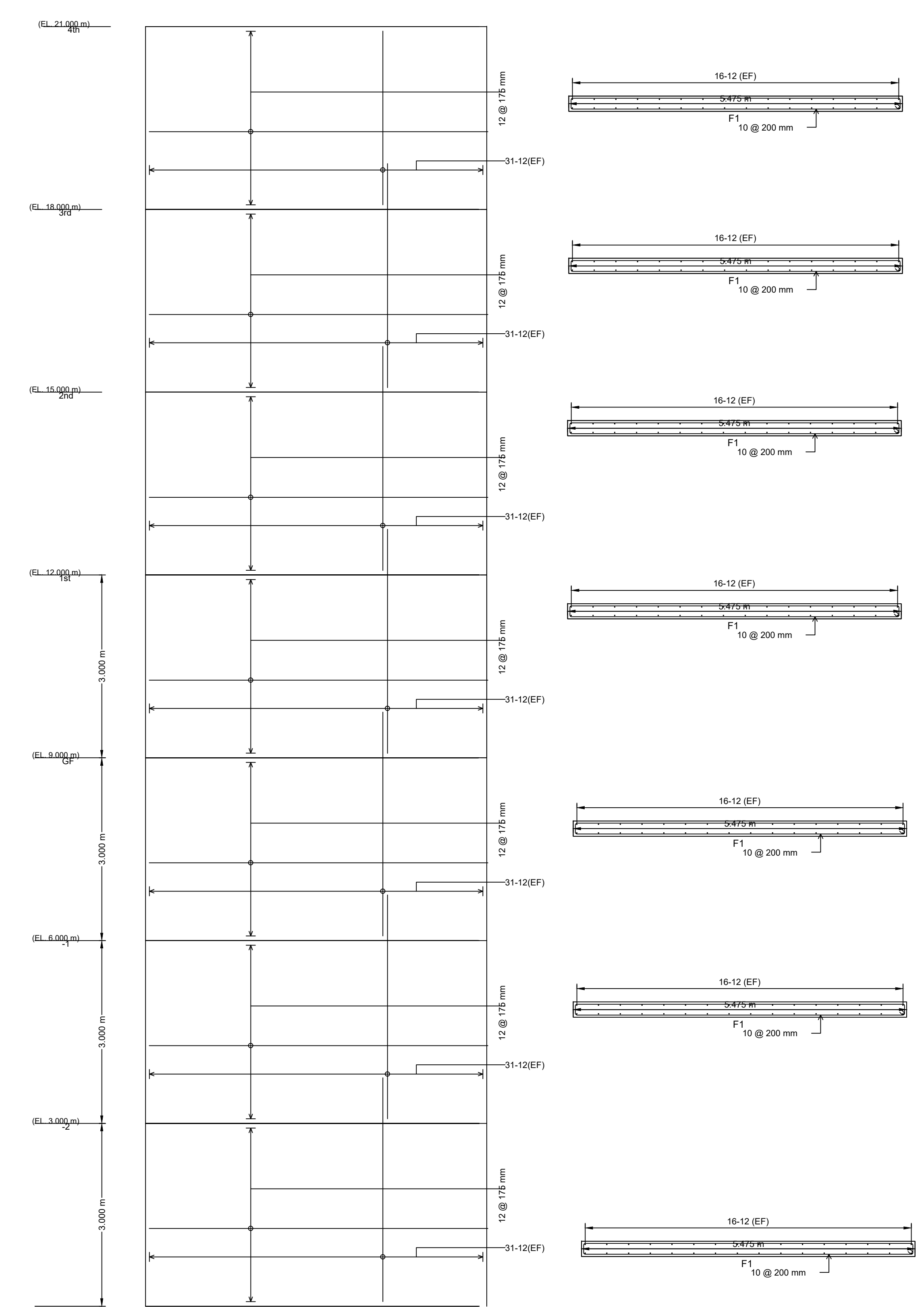
5/11



CW2_CW9 Elevation (1 of 2)
(Scale 1:50)



CW2_CW9 Elevation (2 of 2)
(Scale 1:50)



CW4_CW 11_CW7 Elevation
(Scale 1:50)



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DRAWING TITLE :
Basement Walls Details

Supervisor :

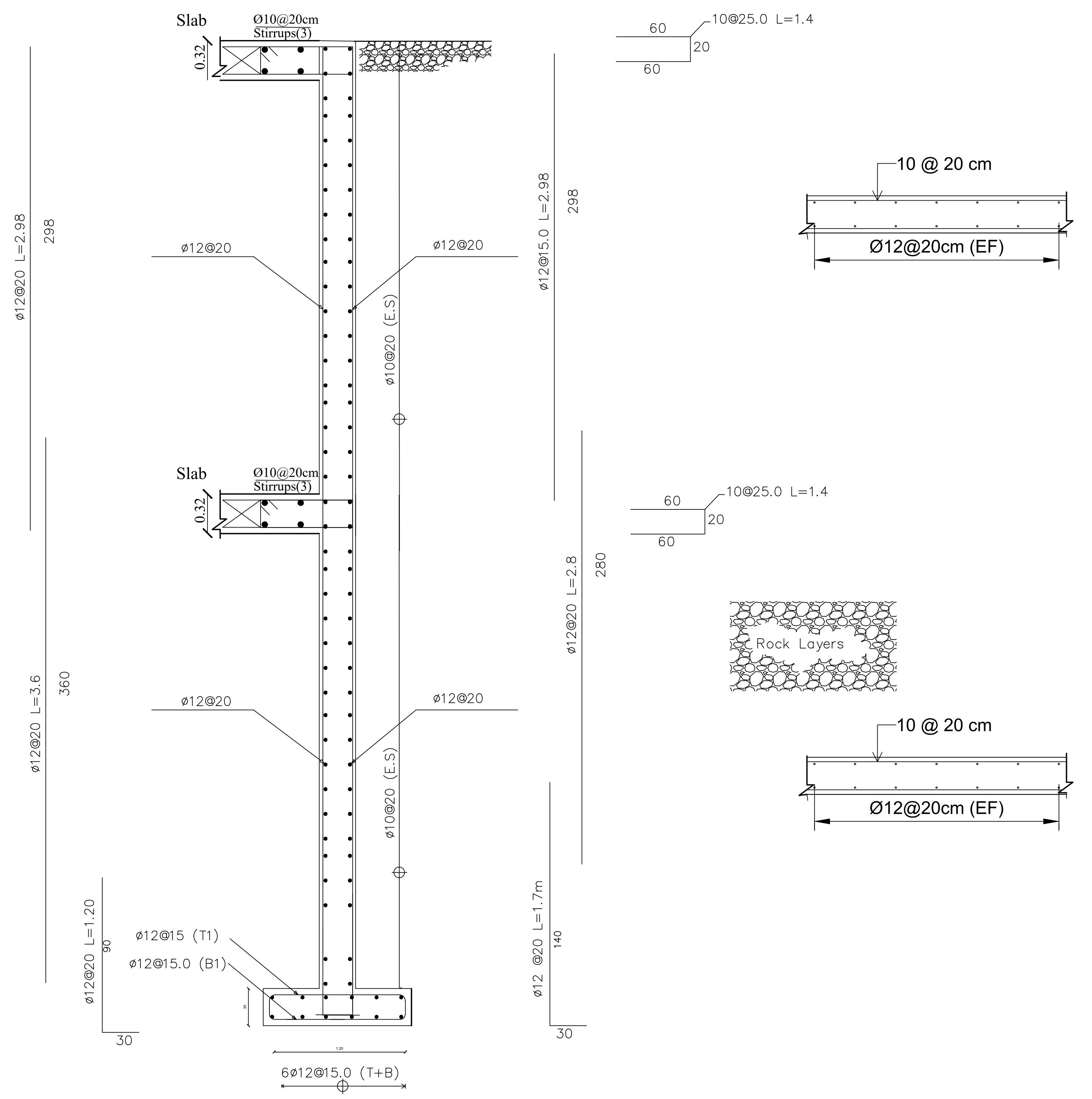
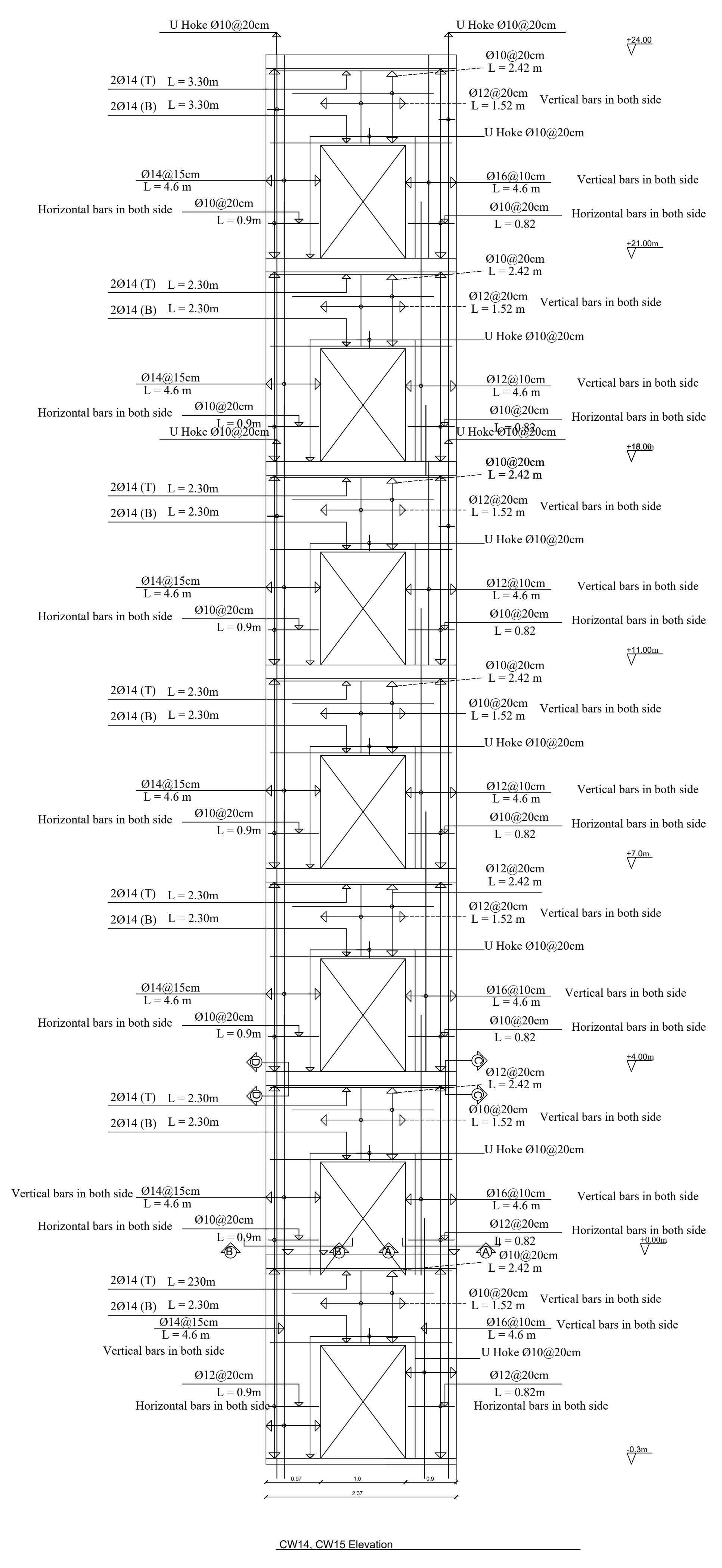
Eng- shadi gumsiah

Designed by :

shaimaa mosleh
moatasem zedat
mohamad salameen
nadeen melhem

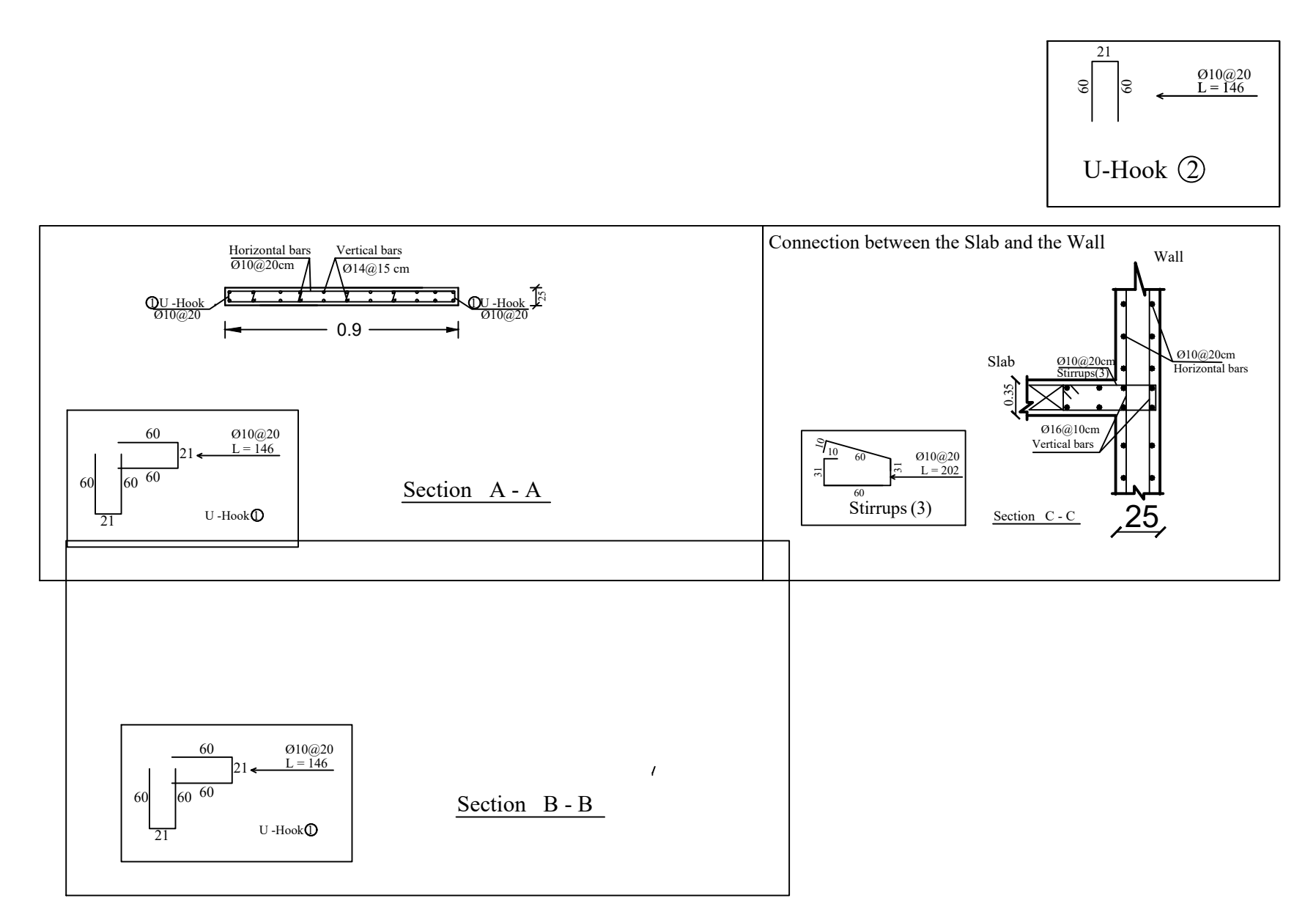
No. of DRAW

5/2



Typical Section In
Basement Wall

scale: 1/20





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Mall

DRAWING TITLE :
-2 BASEMENT Floor
Ribs Plan

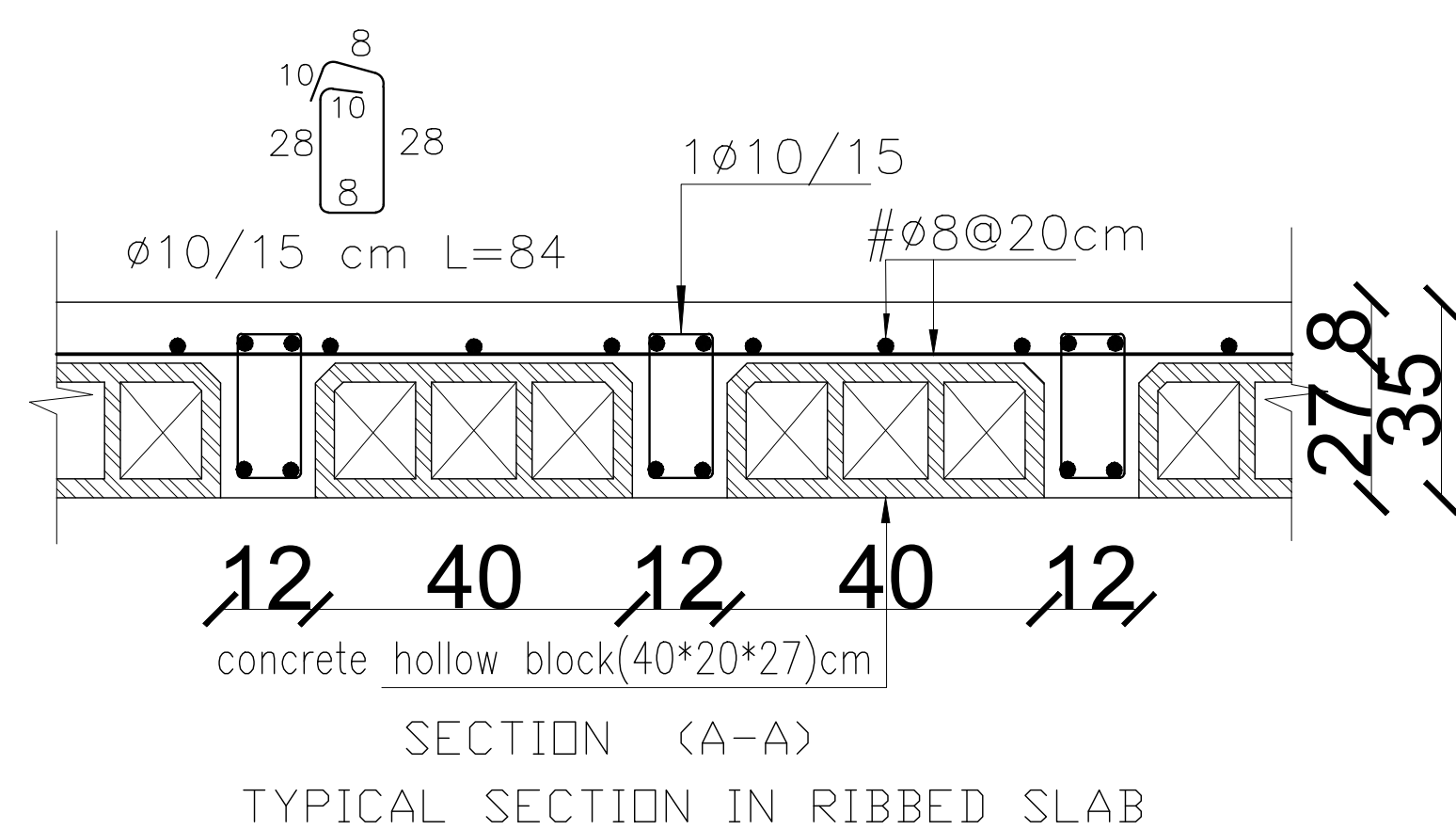
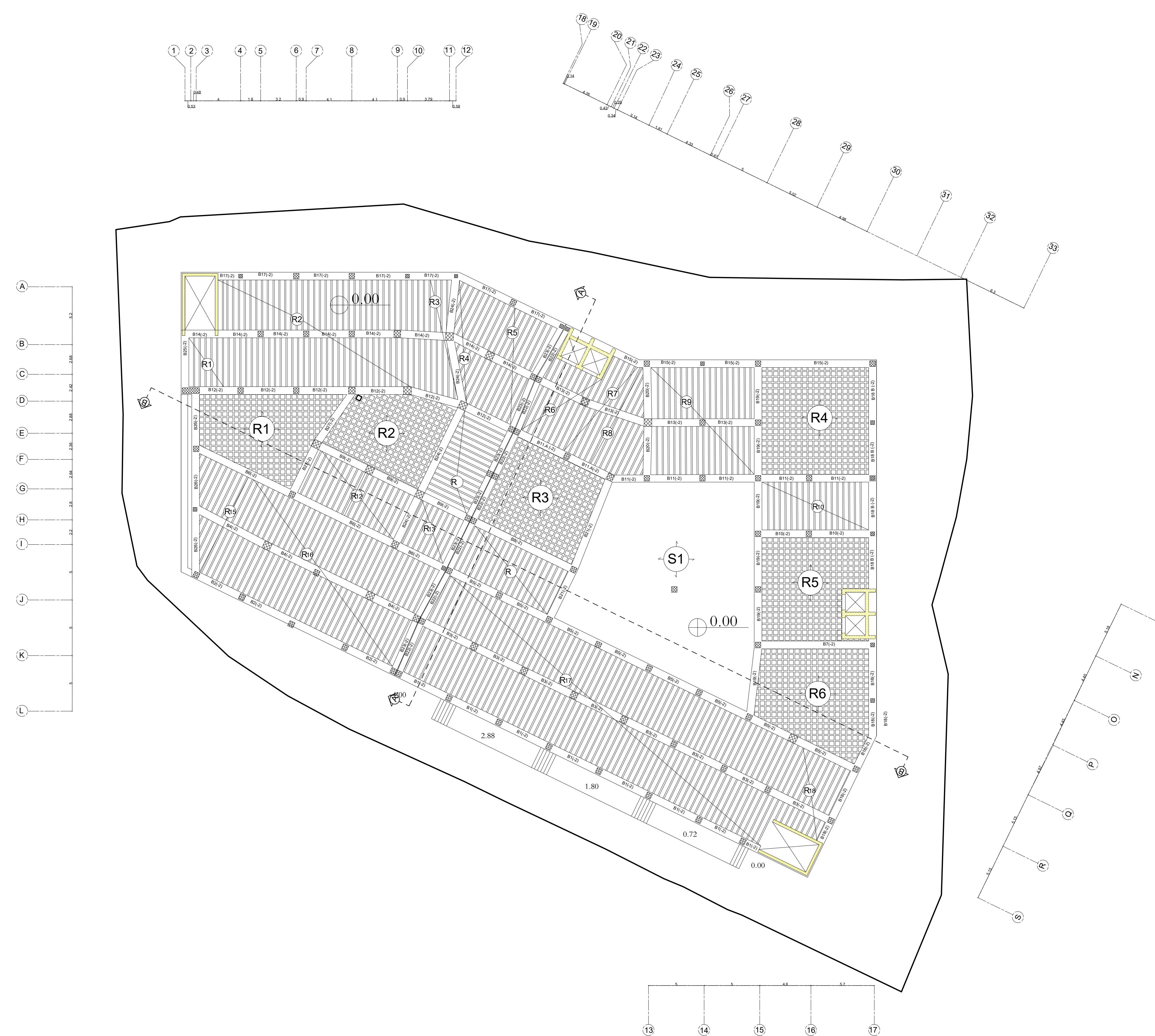
Supervisor :

Eng- shadi qumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	5/3





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DRAWING TITLE :
-1 BASEMENT Floor
Ribs Plan

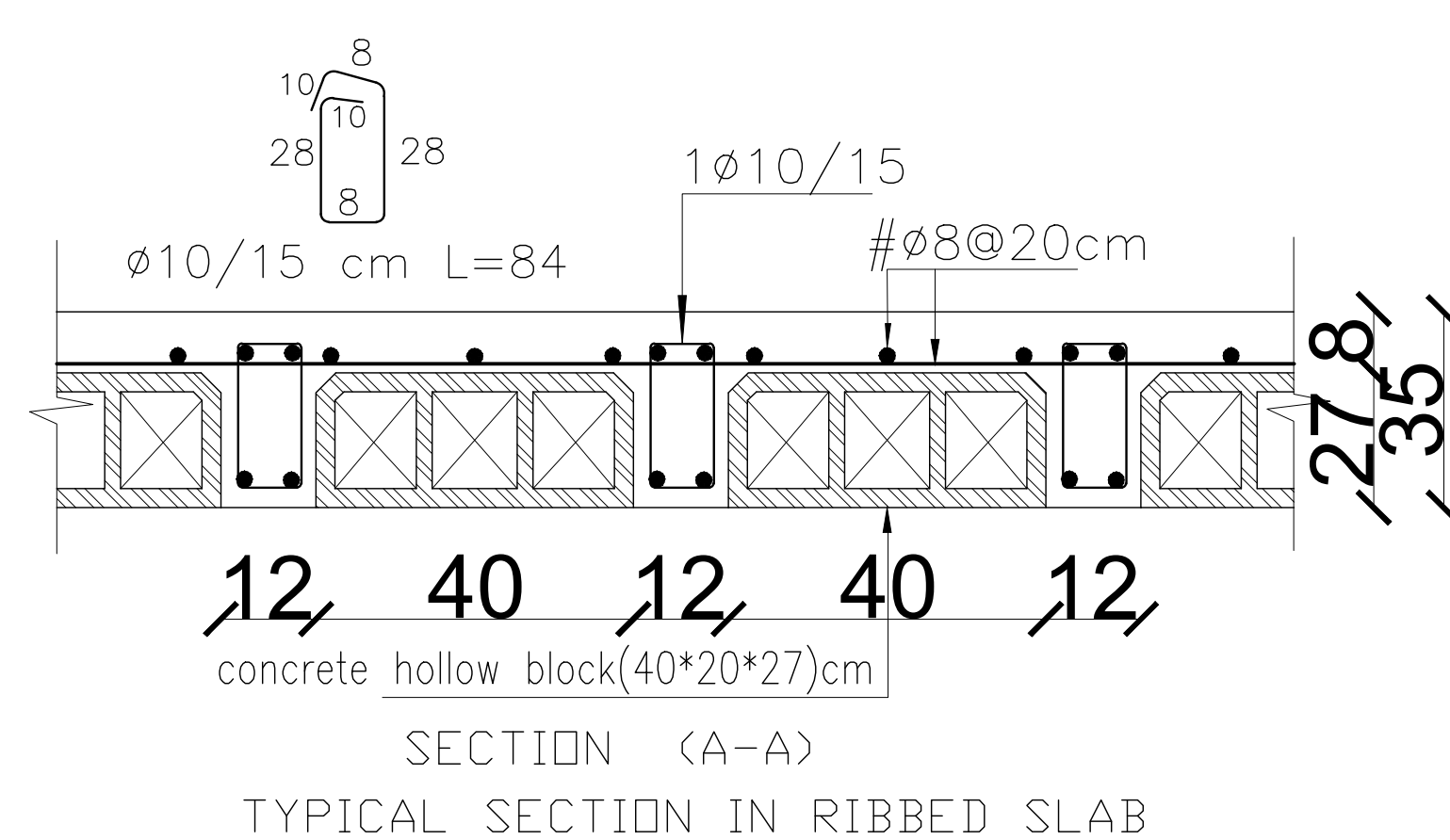
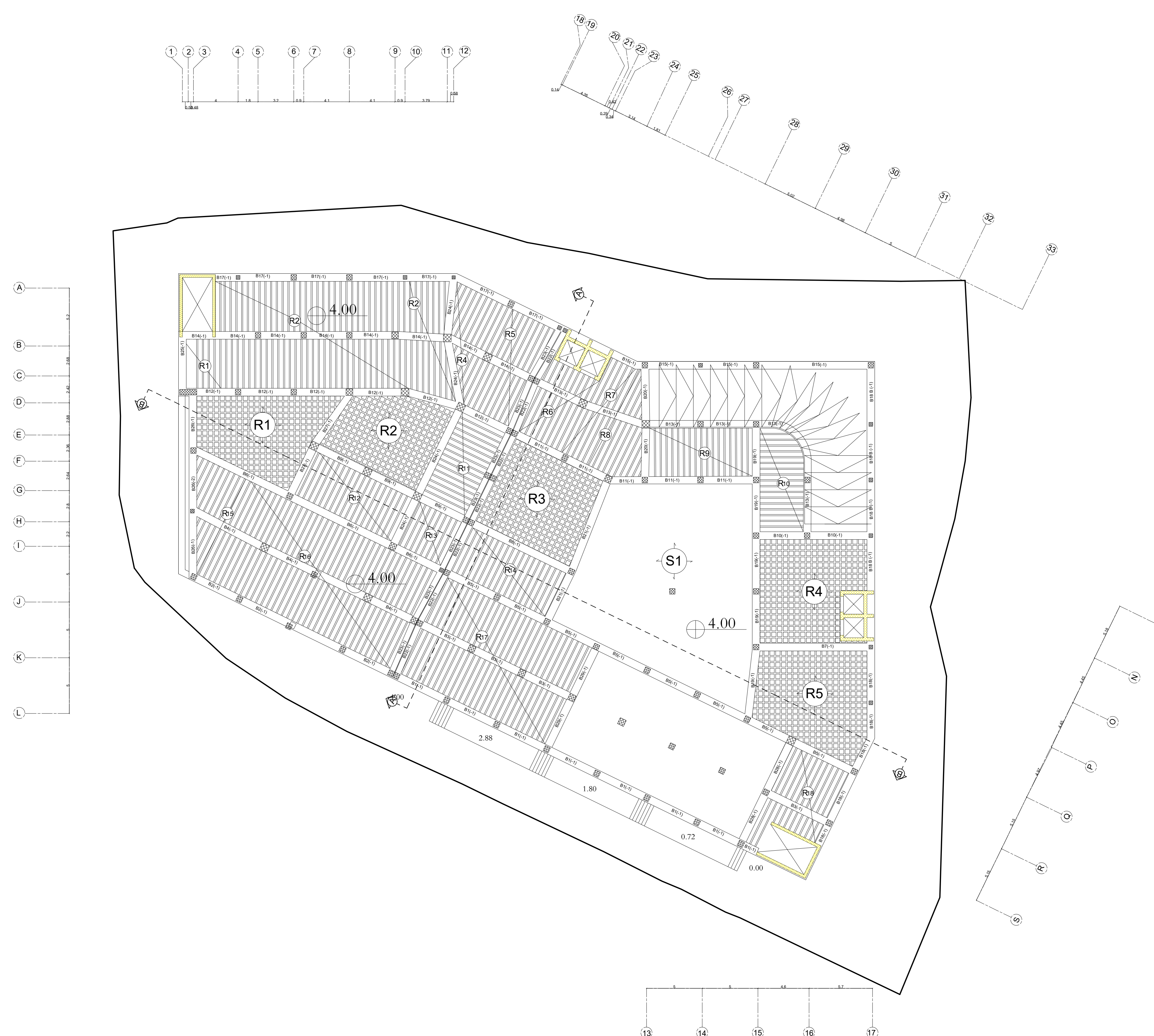
Supervisor :

Eng- shadi qumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	514





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Mall

DRAWING TITLE :
Ground Floor Ribs Plan

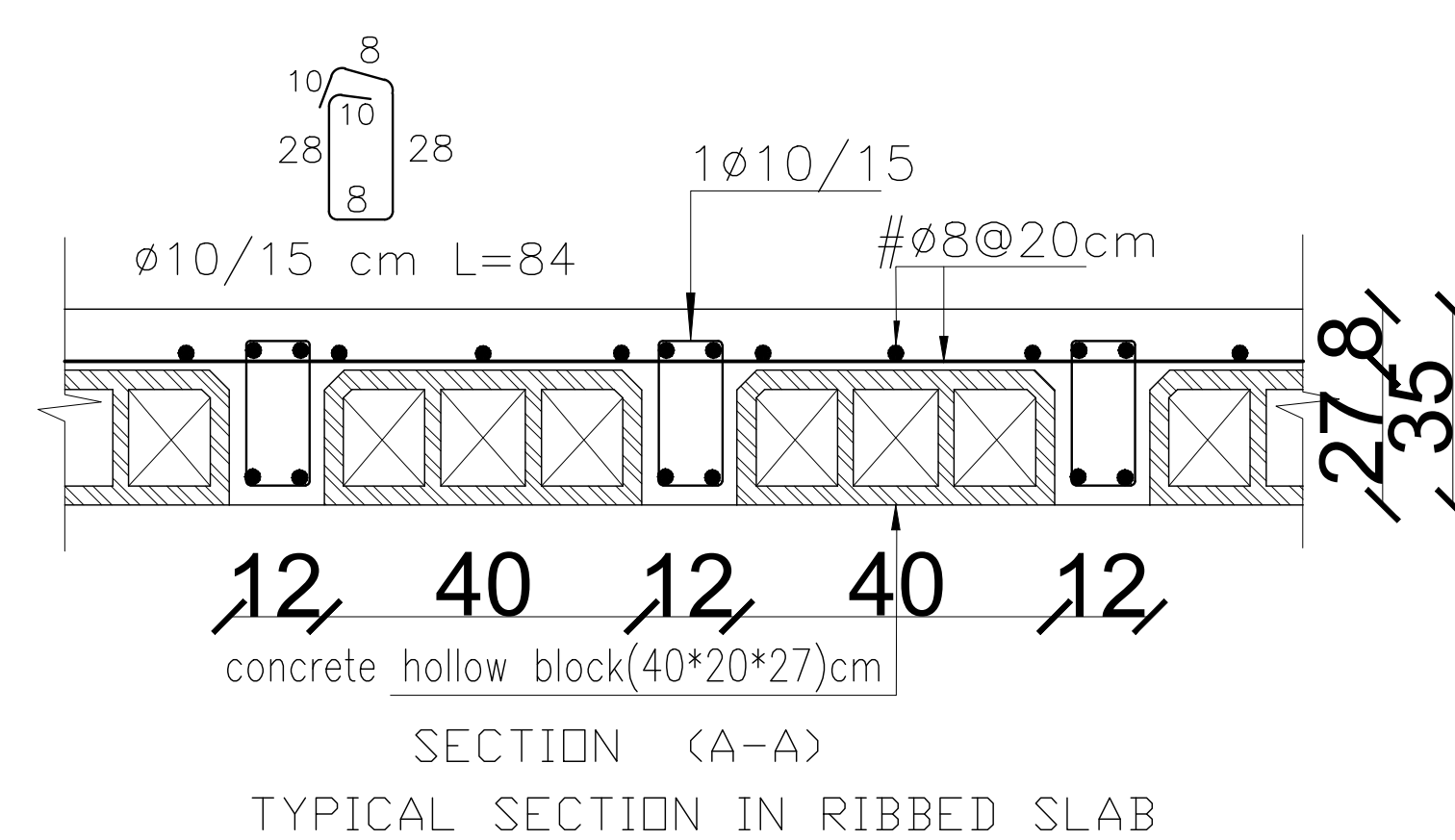
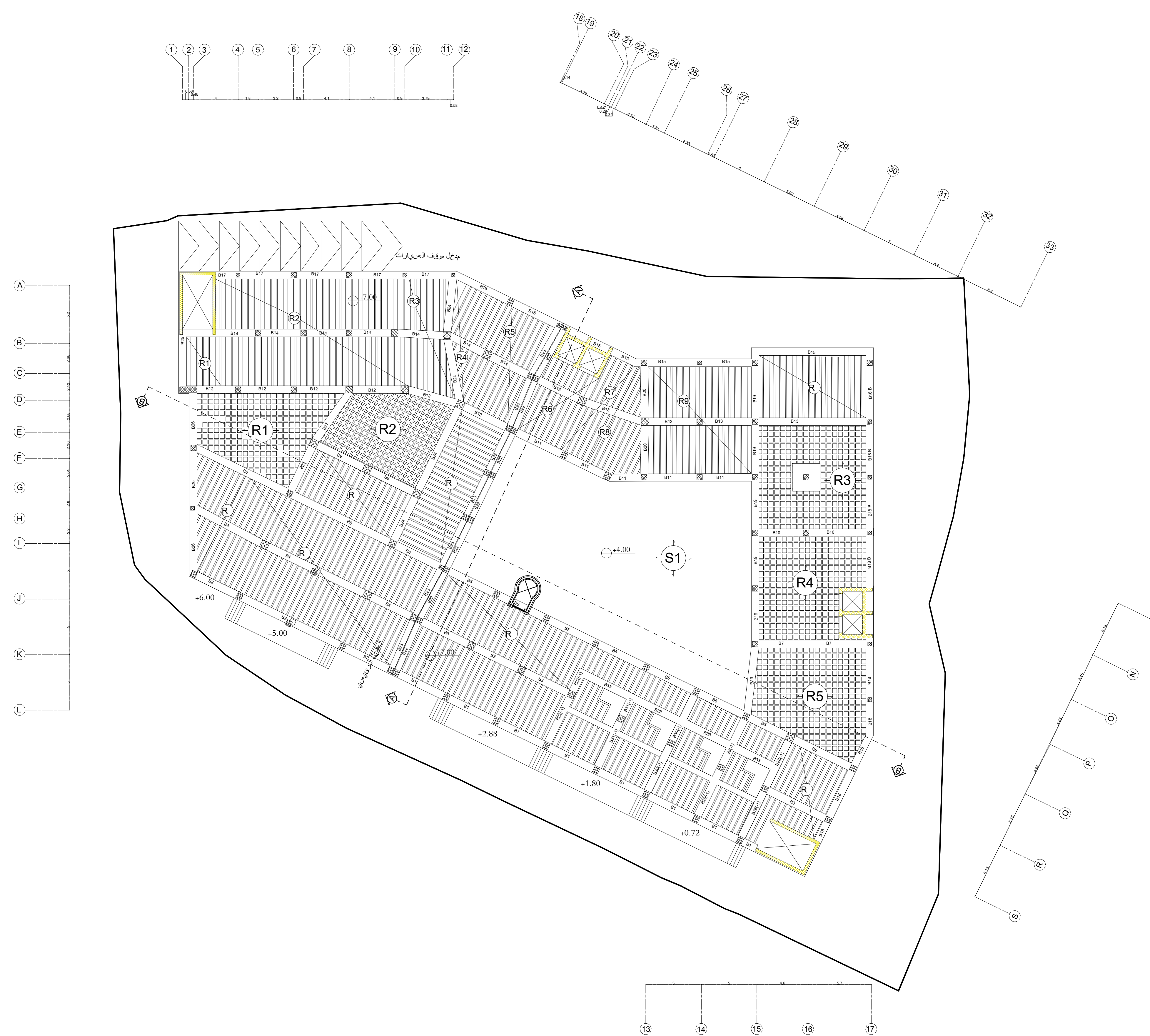
Supervisor :

Eng- shadi qumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	5/5





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DRAWING TITLE :
First Floor Ribs Plan

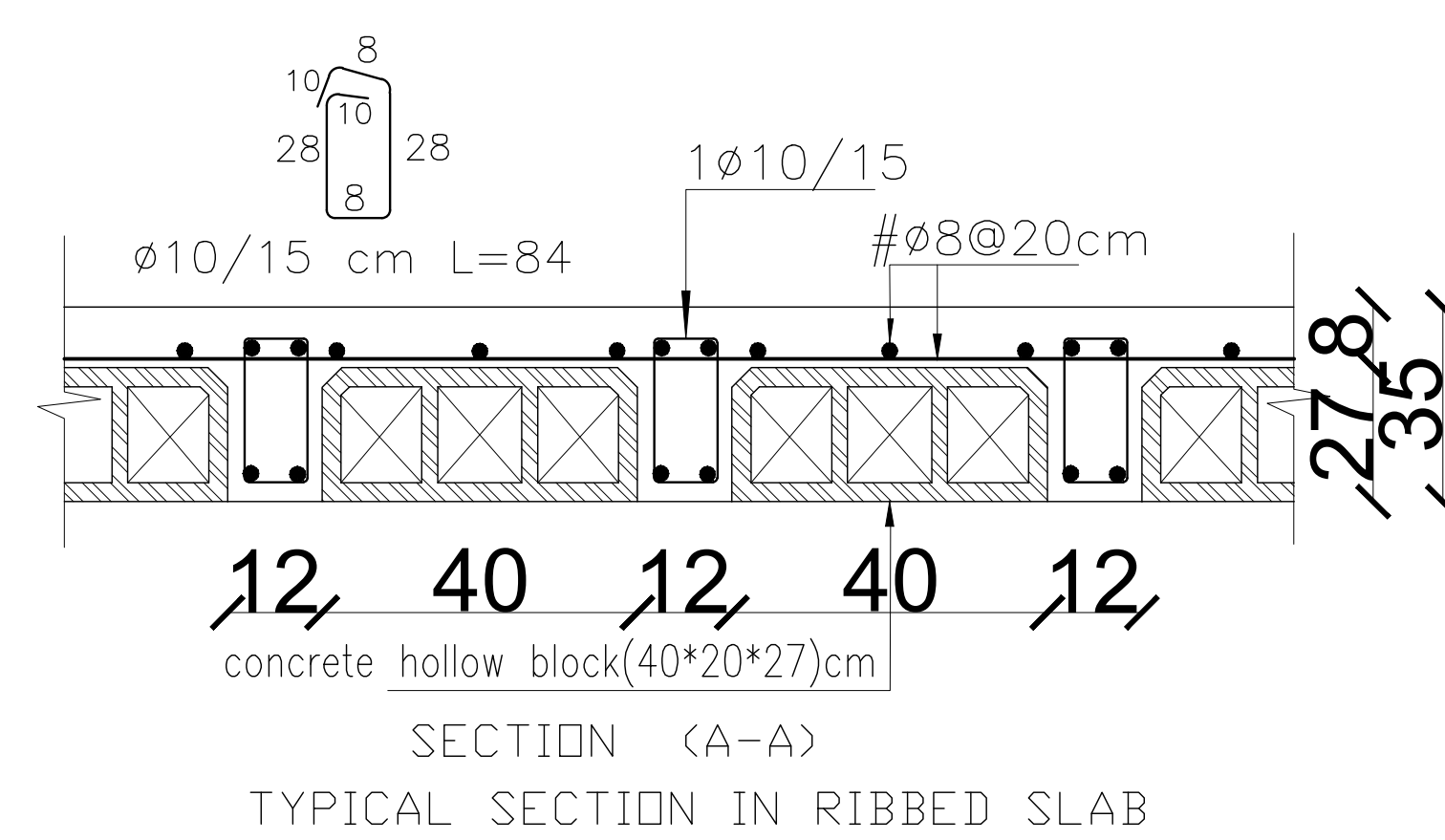
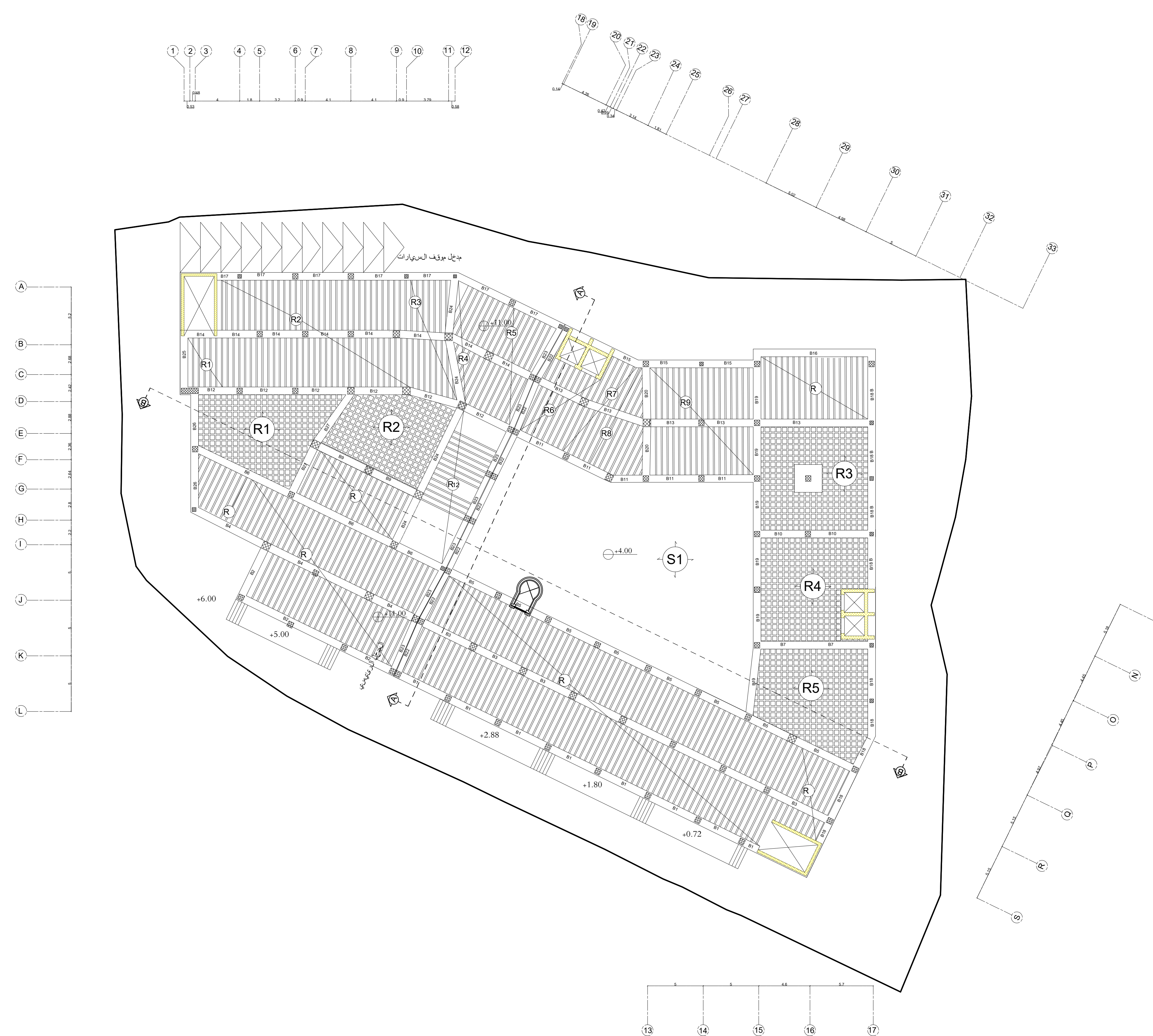
Supervisor :

Eng- shadi qumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	5/6





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DRAWING TITLE :
Second Floor Ribs Plan

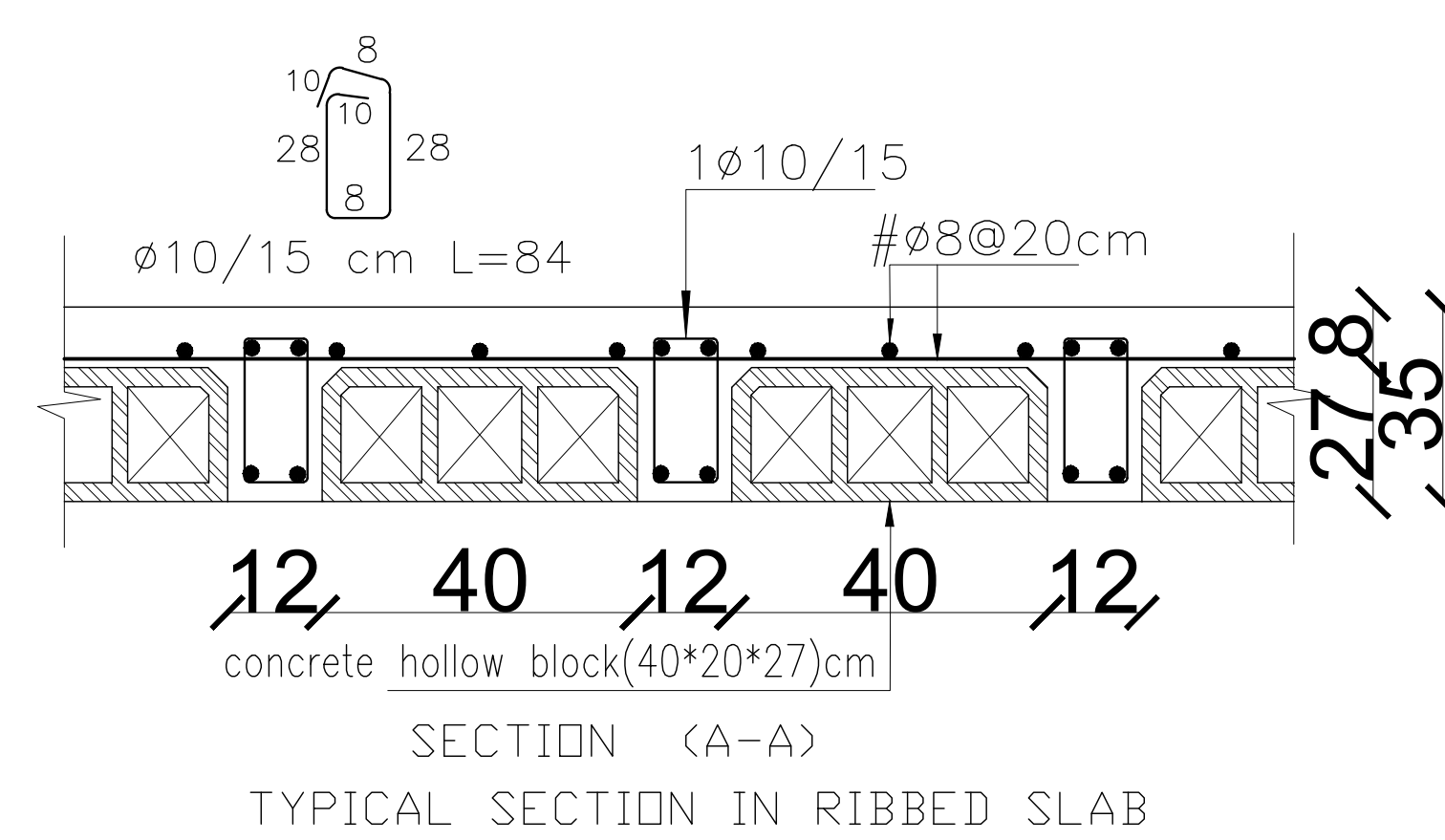
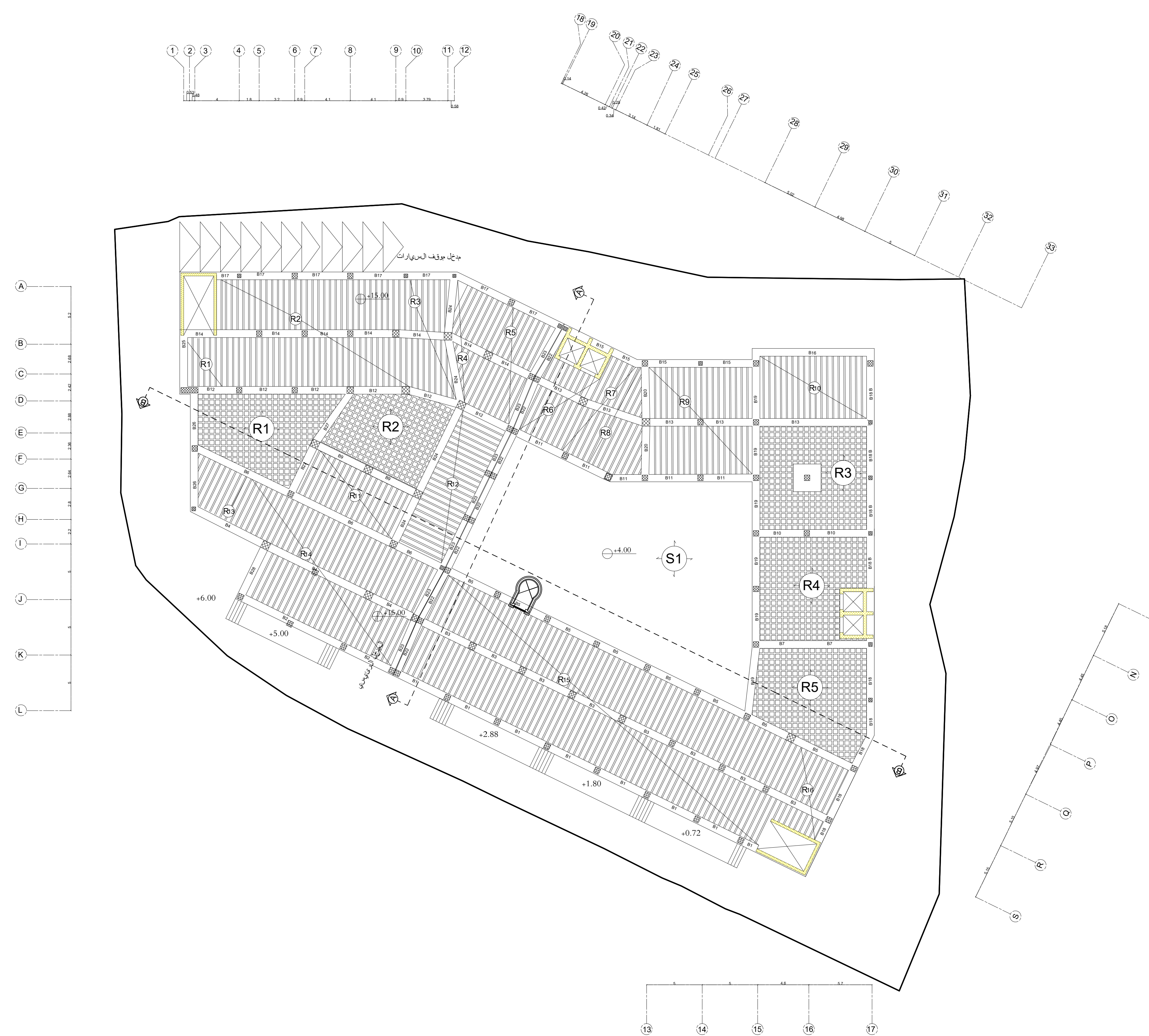
Supervisor :

Eng- shadi qumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	S17





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DRAWING TITLE :
Third Floor Ribs Plan

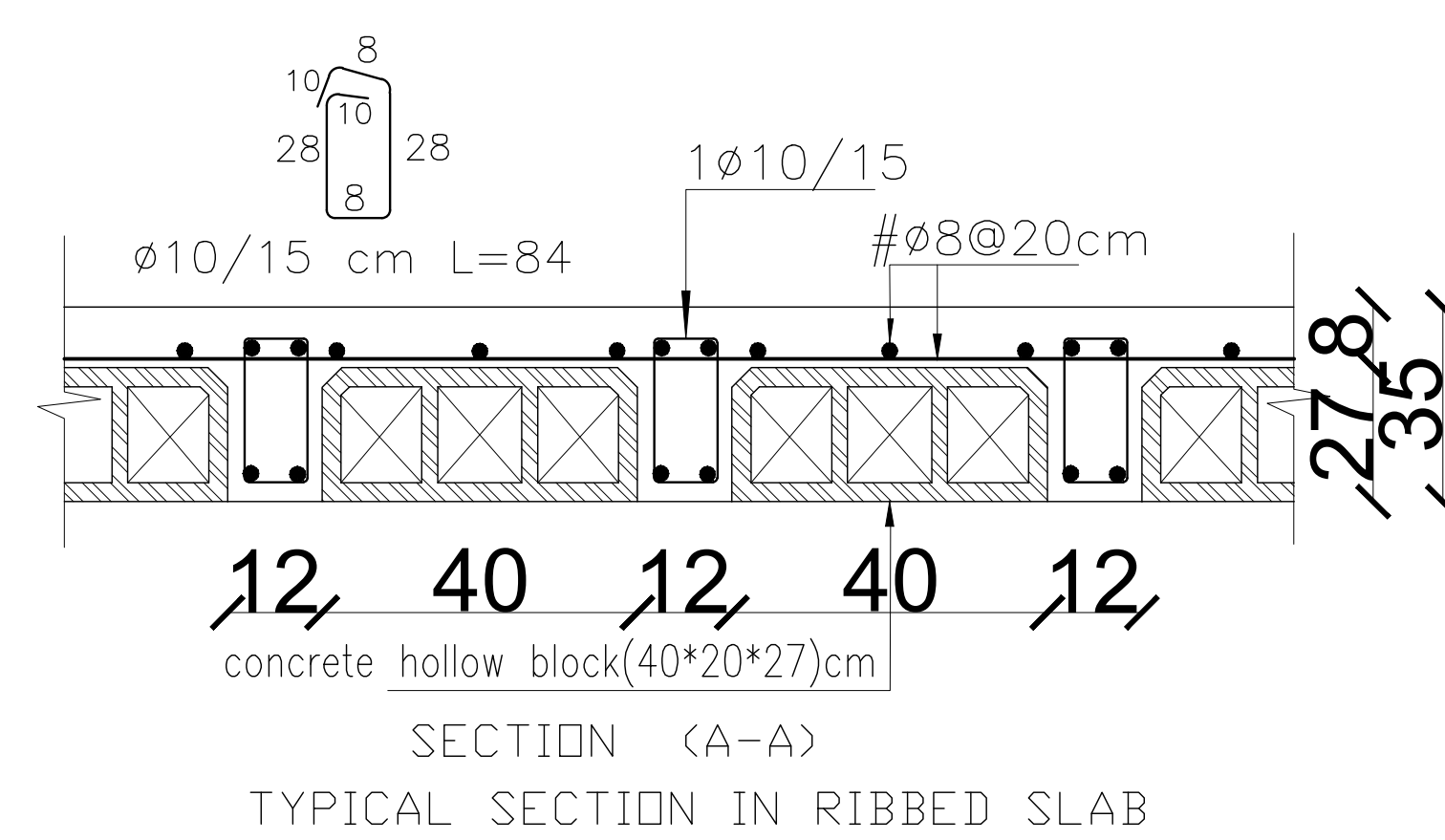
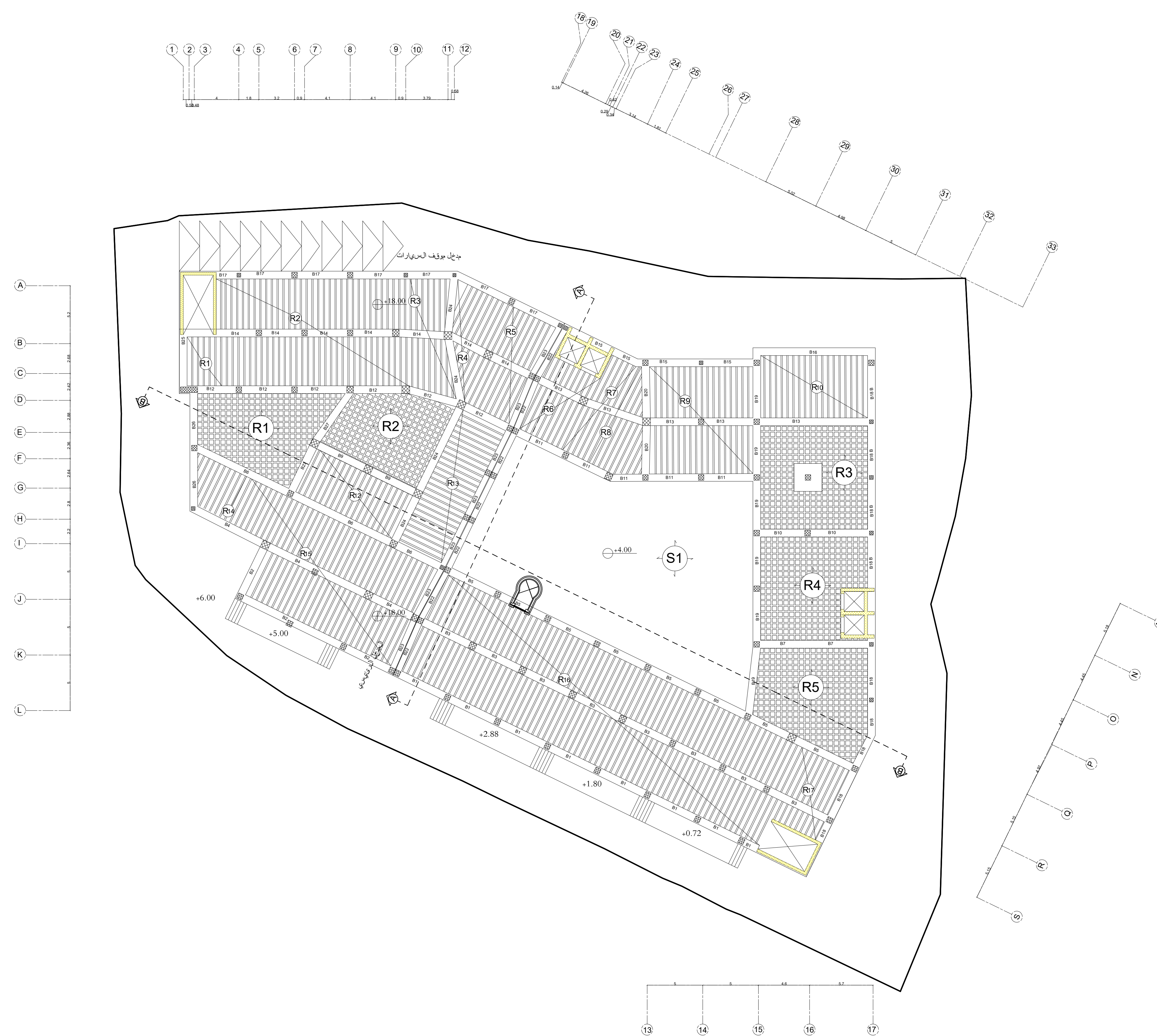
Supervisor :

Eng- shadi qumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	5/8





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DRAWING TITLE :
Fuorth Floor Ribs Plan

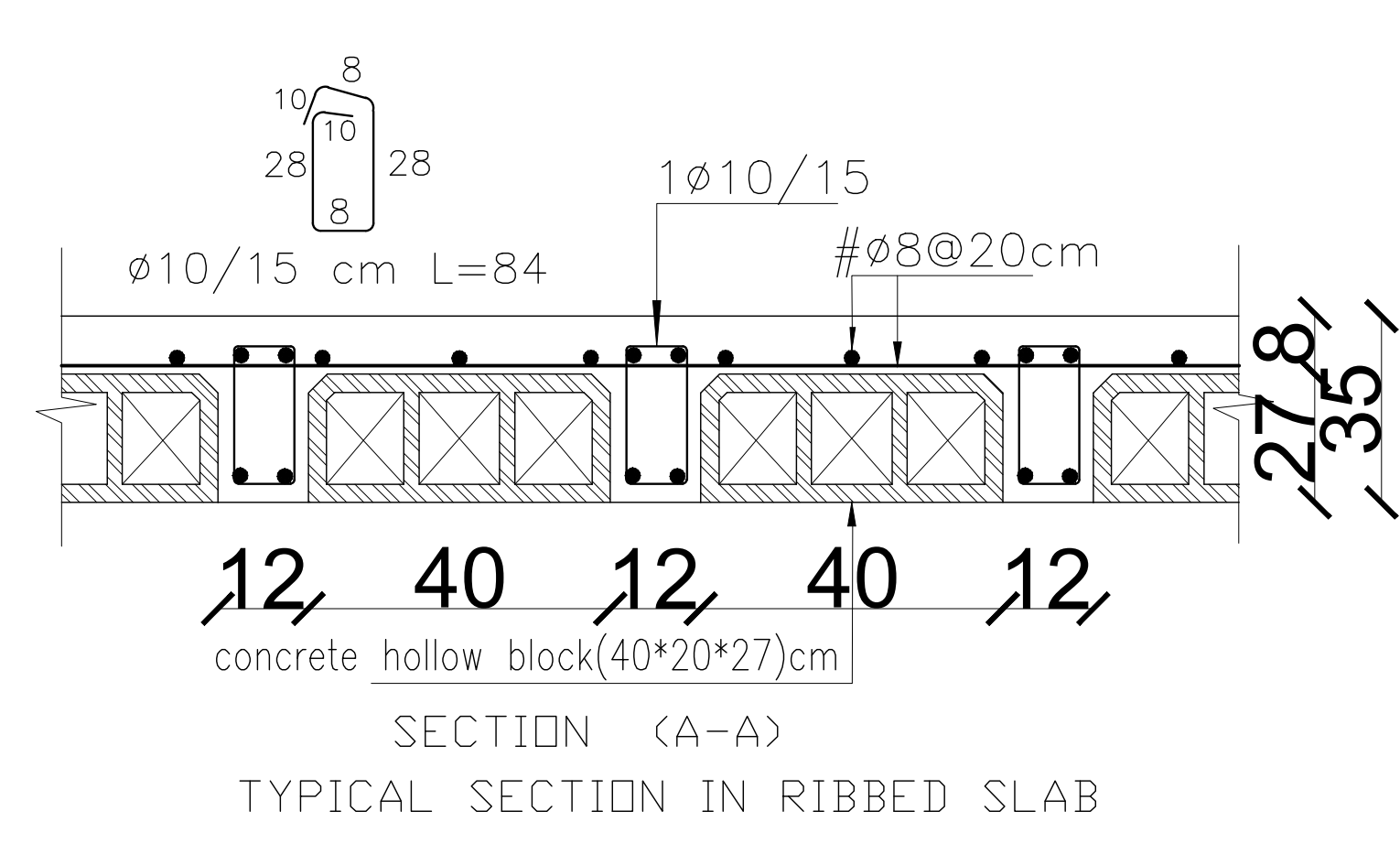
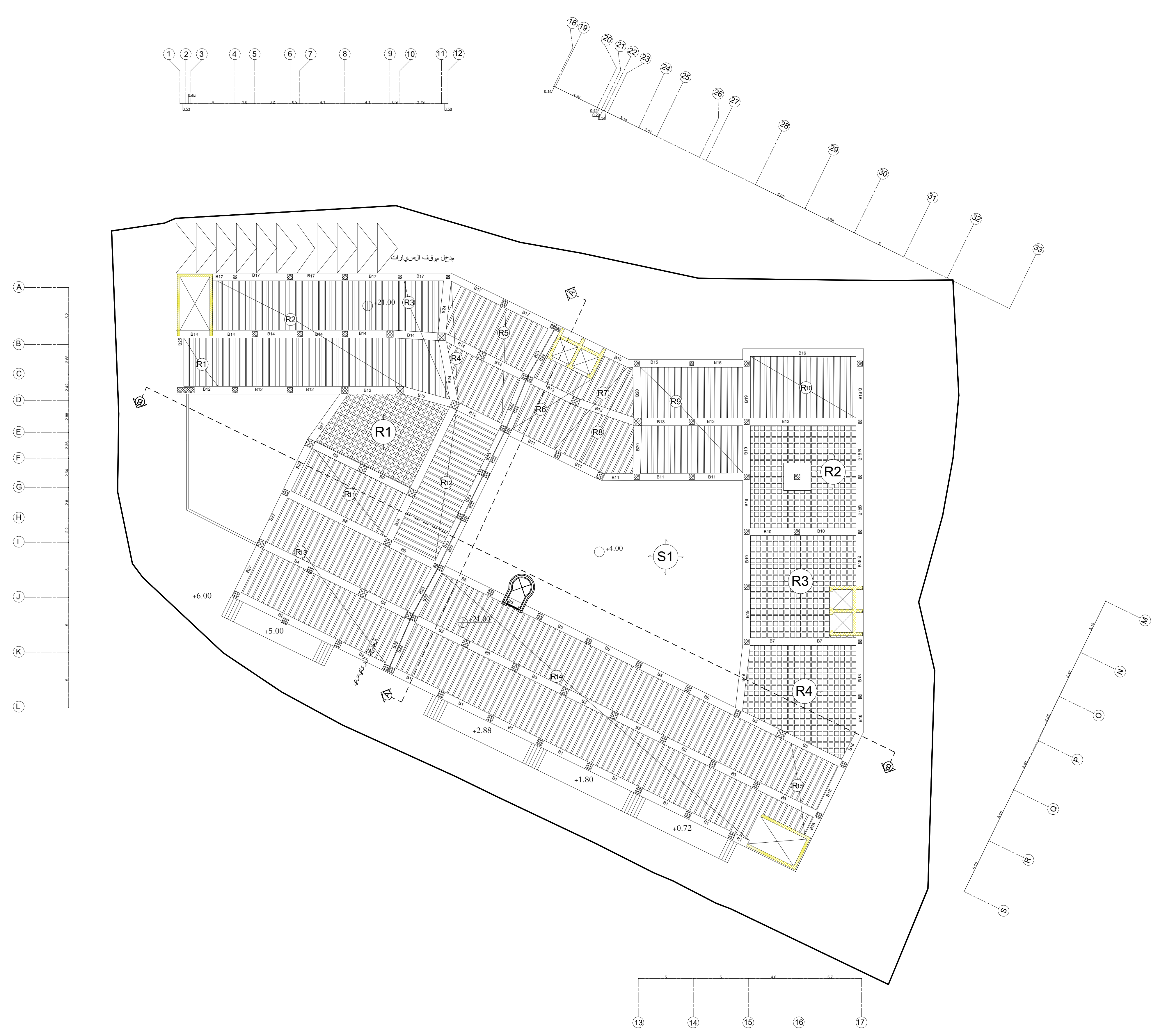
Supervisor :

Eng- shadi qumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	5/9





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DRAWING TITLE :
Fifth Floor Ribs Plan

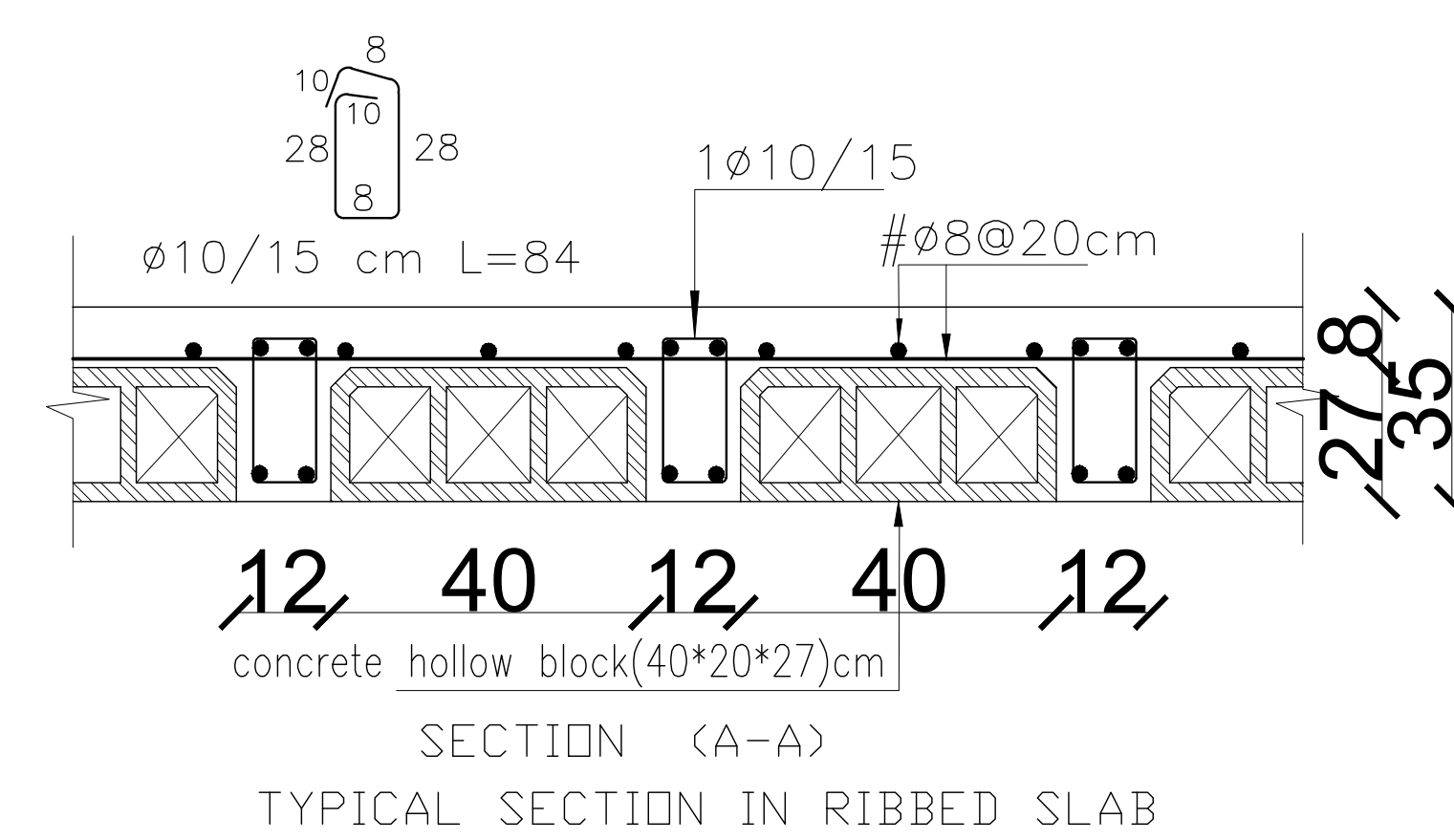
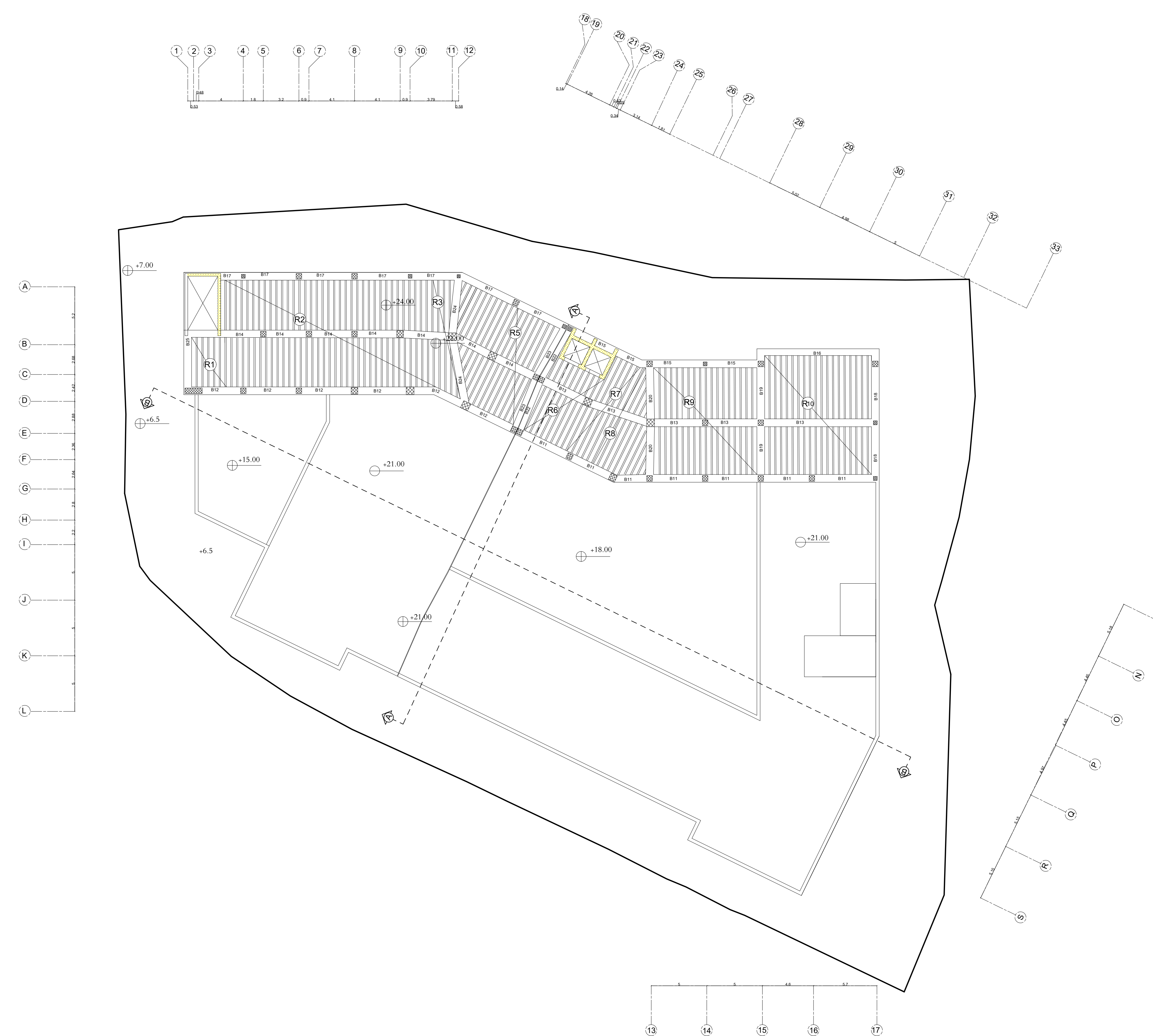
Supervisor :

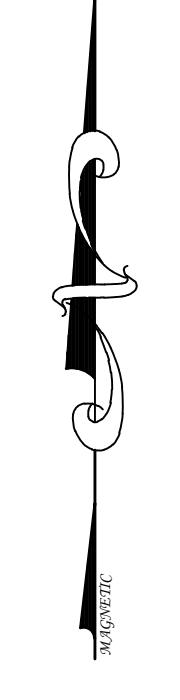
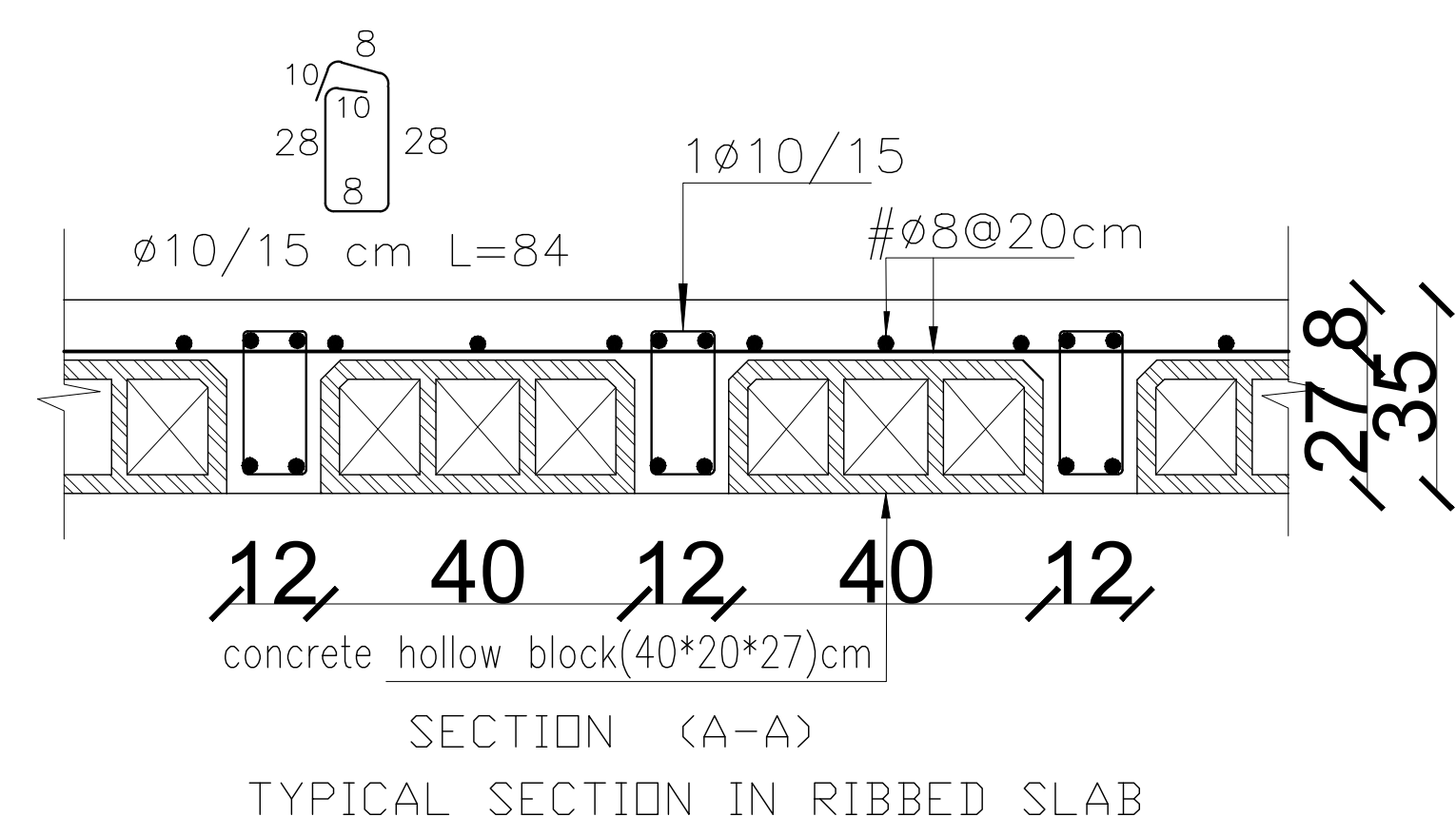
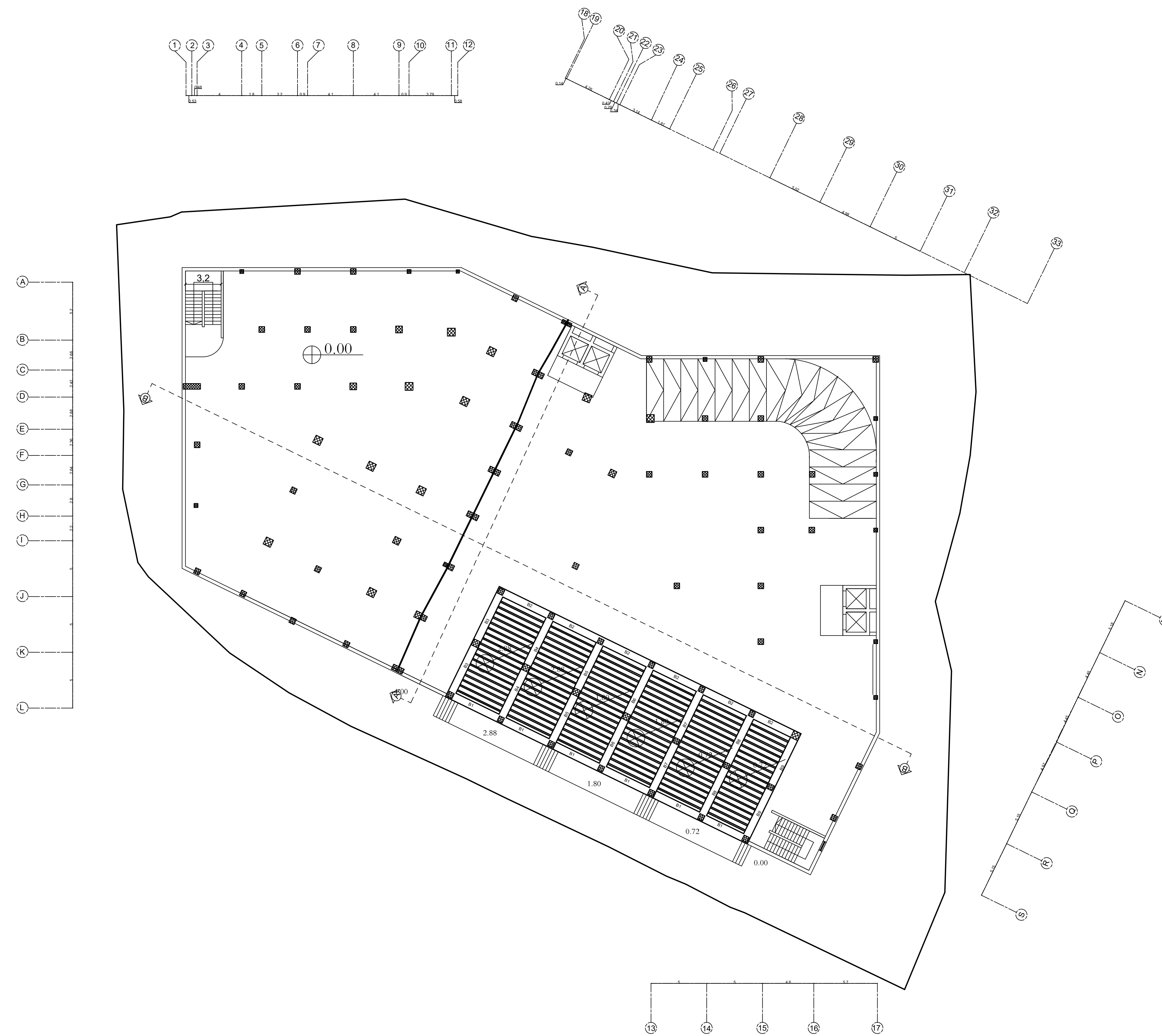
Eng- shadi qumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	520





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Mall

*DRAWING TITLE :
Stories Ribs Plan*

*Supervisor :
Eng- shadi qumsiah
Designed by :
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

SCALE	No. of DRAW
1/200	521



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Mall

DRAWING TITLE :

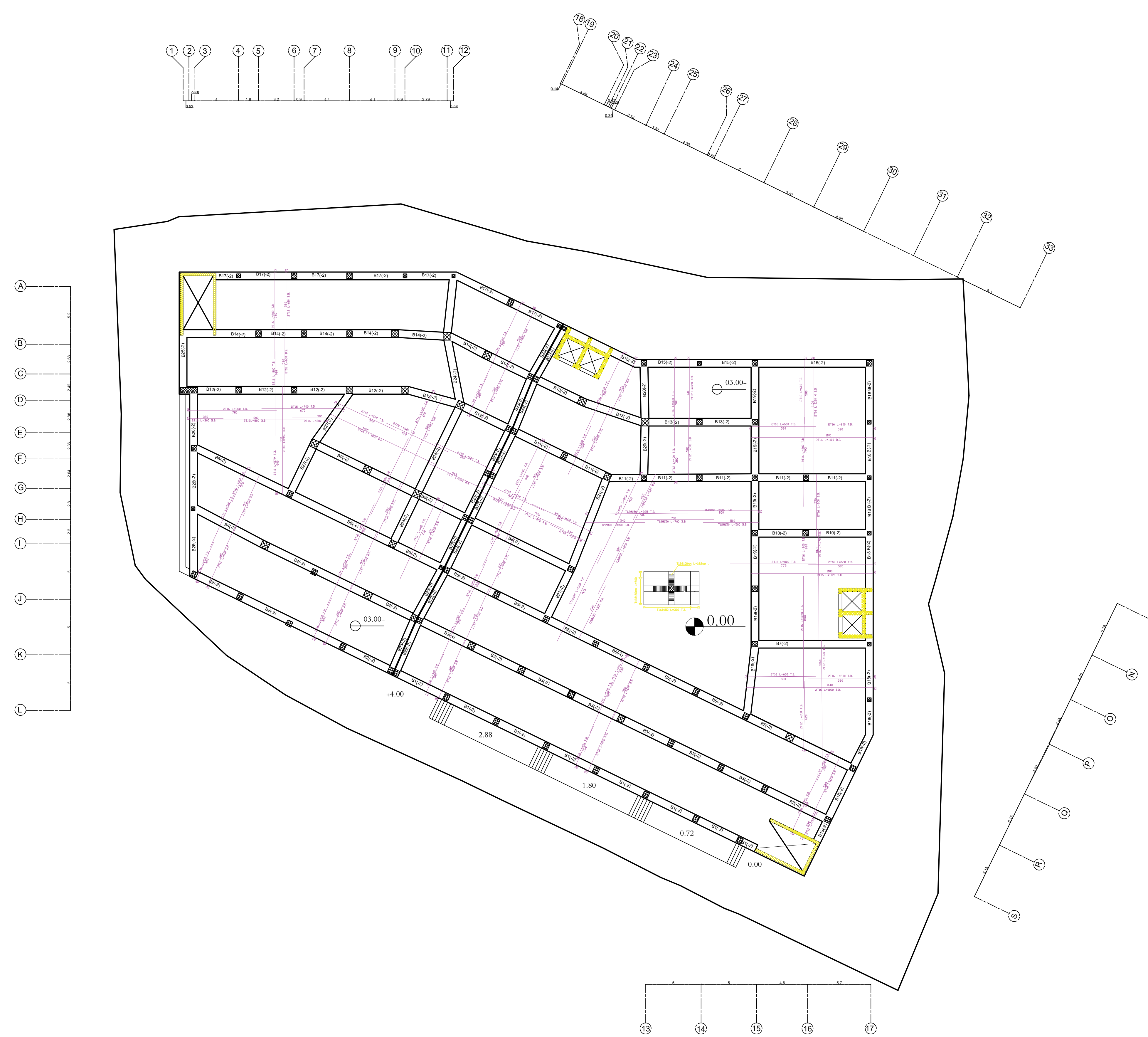
**-2 Basement Floor
Reinforcement Details**

Supervisor :

Eng- shadi qumsiah

Designed by :

*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*



<i>SCALE</i>	<i>No. of DRAW</i>
<i>1/200</i>	<i>522</i>



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DRAWING TITLE :

**-1 Basement Floor
Reinforcement Details**

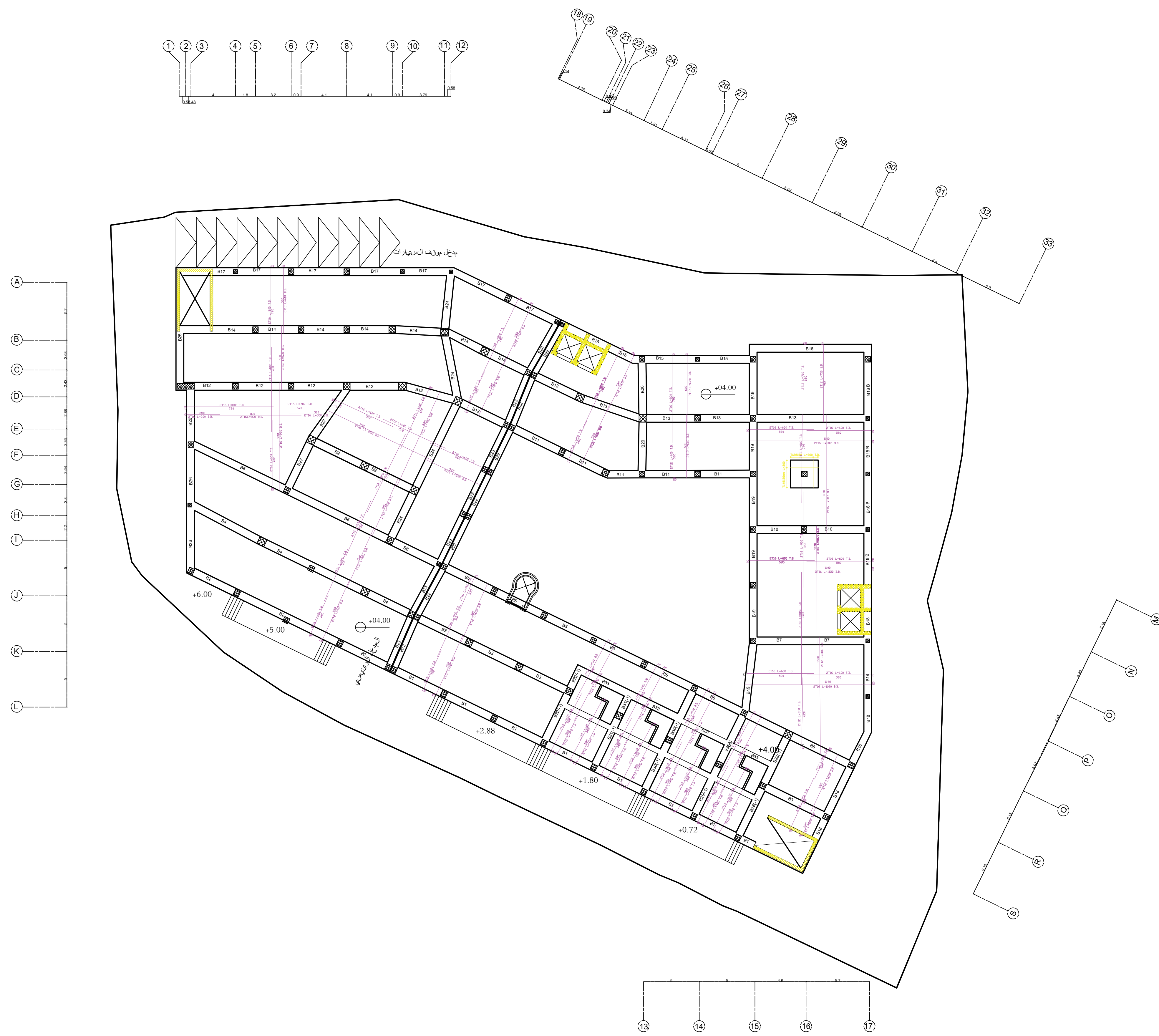
Supervisor :

Eng- shadi qumsiah

Designed by :

*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

<i>SCALE</i>	<i>No.of DRAW</i>
<i>1/200</i>	<i>523</i>



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DRAWING TITLE :

**Ground Floor
Reinforcement Details**

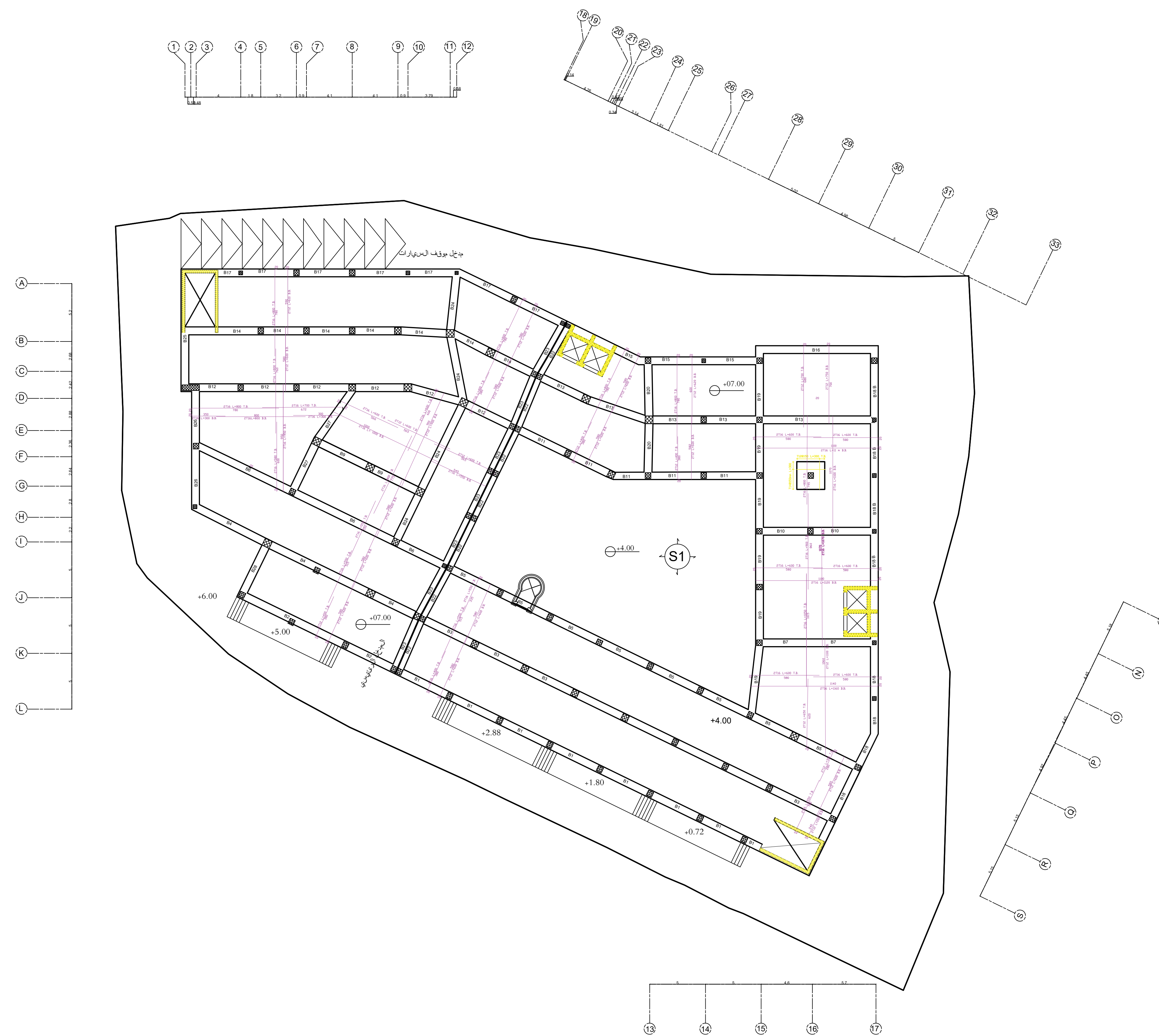
Supervisor :

Eng- shadi qumsiah

Designed by :

*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

<i>SCALE</i>	<i>No.of DRAW</i>
<i>1/200</i>	<i>524</i>



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Mall

DRAWING TITLE :
**First Floor
Reinforcement Details**

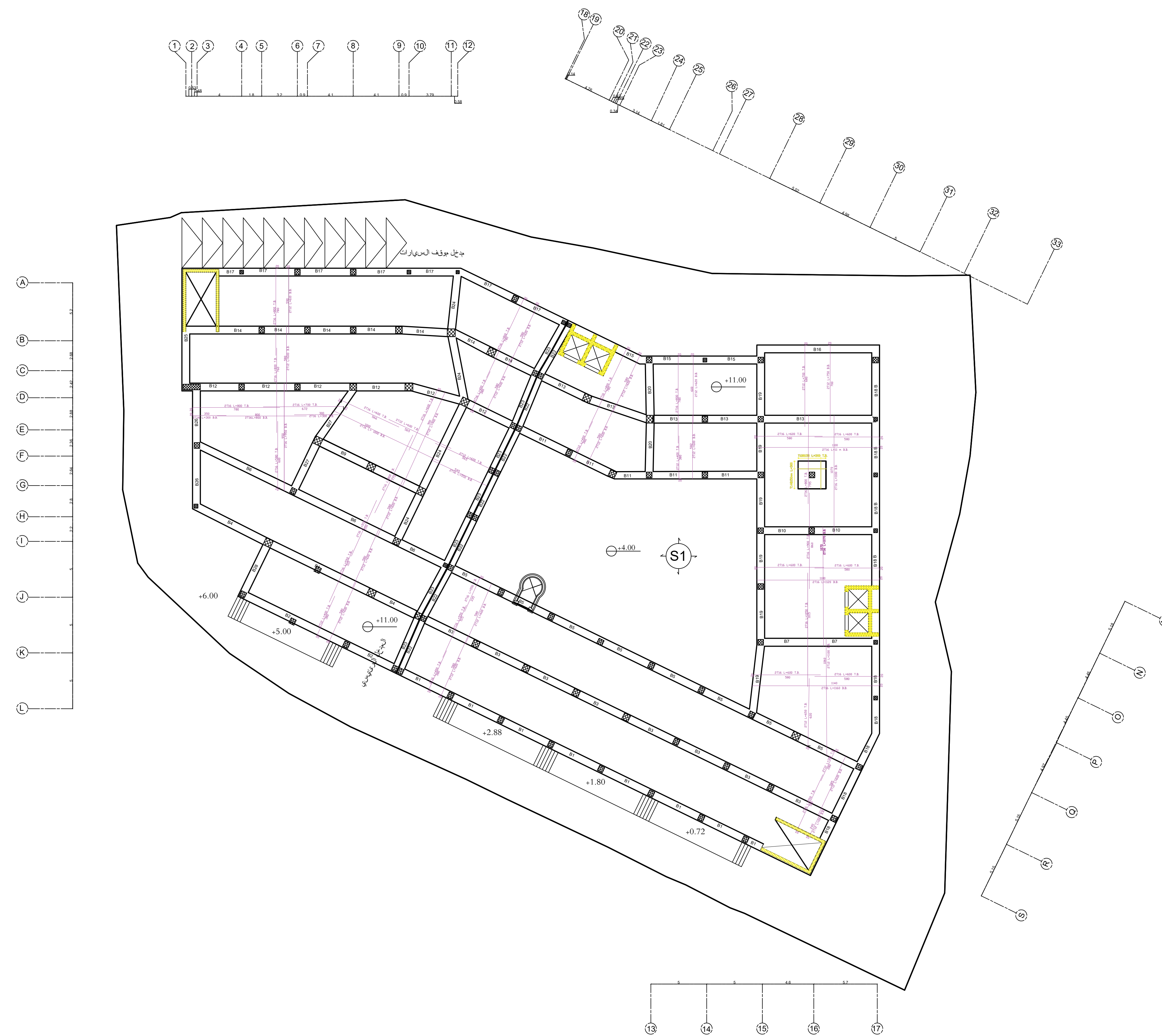
Supervisor :

Eng- shadi qumsiah

Designed by :

*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

<i>SCALE</i>	<i>No.of DRAW</i>
<i>1/200</i>	<i>525</i>



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DRAWING TITLE :

**Second Floor
Reinforcement Details**

Supervisor :

Eng- shadi qumsiah

Designed by :

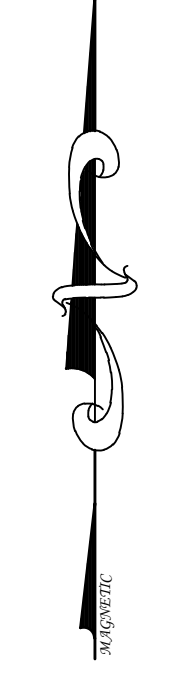
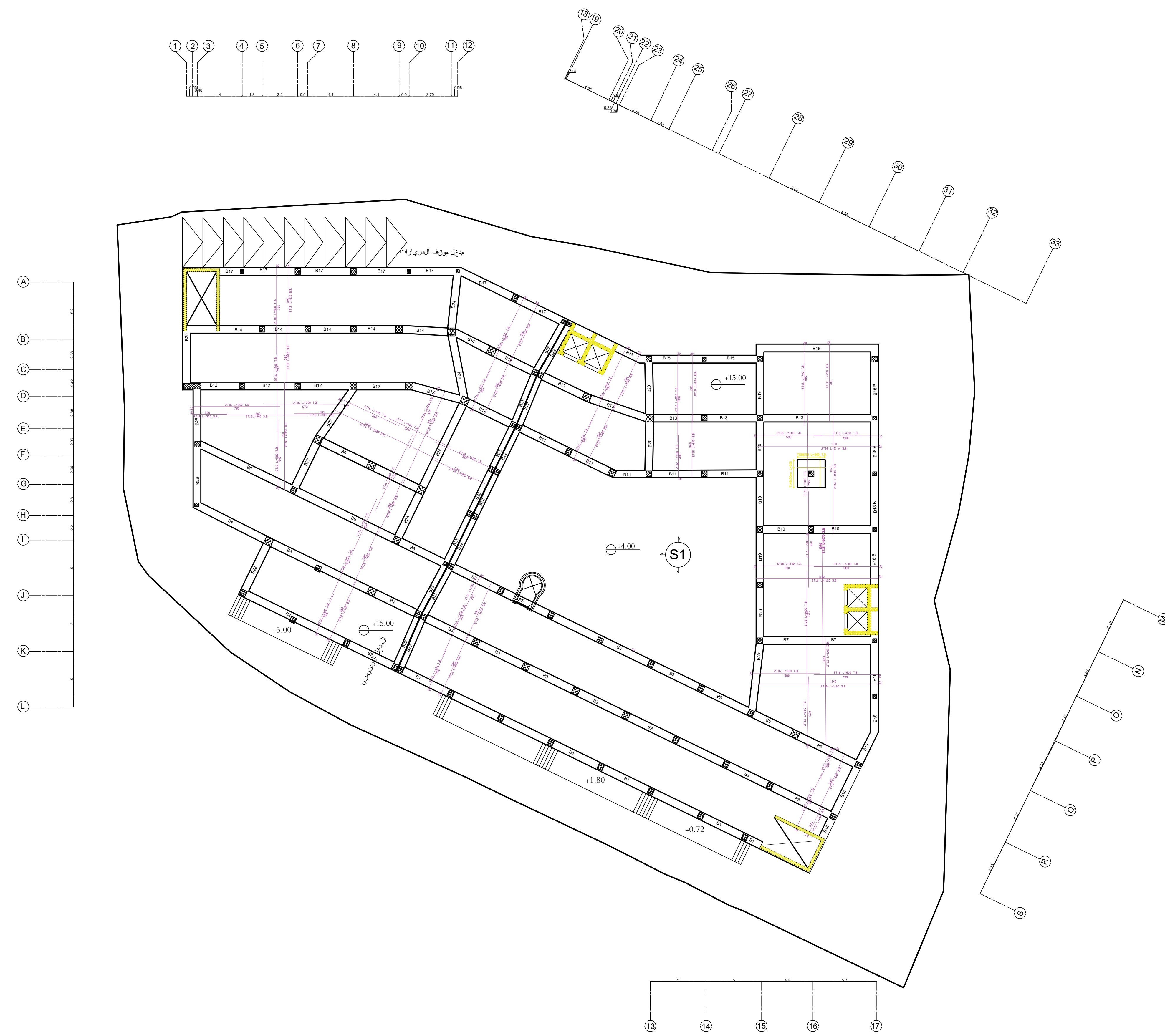
shaimaa salah

moatasem zedat

mohamad salameen

nadeen melhem

<i>SCALE</i>	<i>No. of DRAW</i>
<i>1/200</i>	<i>526</i>



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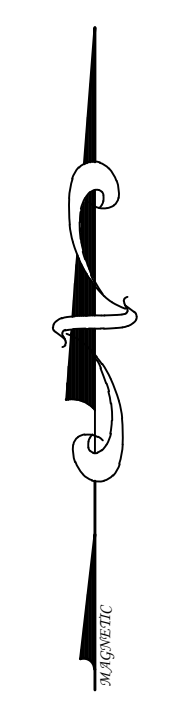
Mall

DRAWING TITLE :
**Third Floor
Reinforcement Details**

Supervisor :
Eng- shadi qumsiah

Designed by :
*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

<i>SCALE</i>	<i>No.of DRAW</i>
<i>1/200</i>	<i>521</i>



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DRAWING TITLE :

**Fuorth Floor
Reinforcement Details**

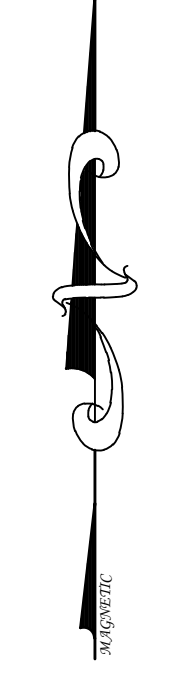
Supervisor :

Eng- shadi qumsiah

Designed by :

*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

<i>SCALE</i>	<i>No.of DRAW</i>
<i>1/200</i>	<i>528</i>



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Mall

DRAWING TITLE :

**Fifth Floor
Reinforcement Details**

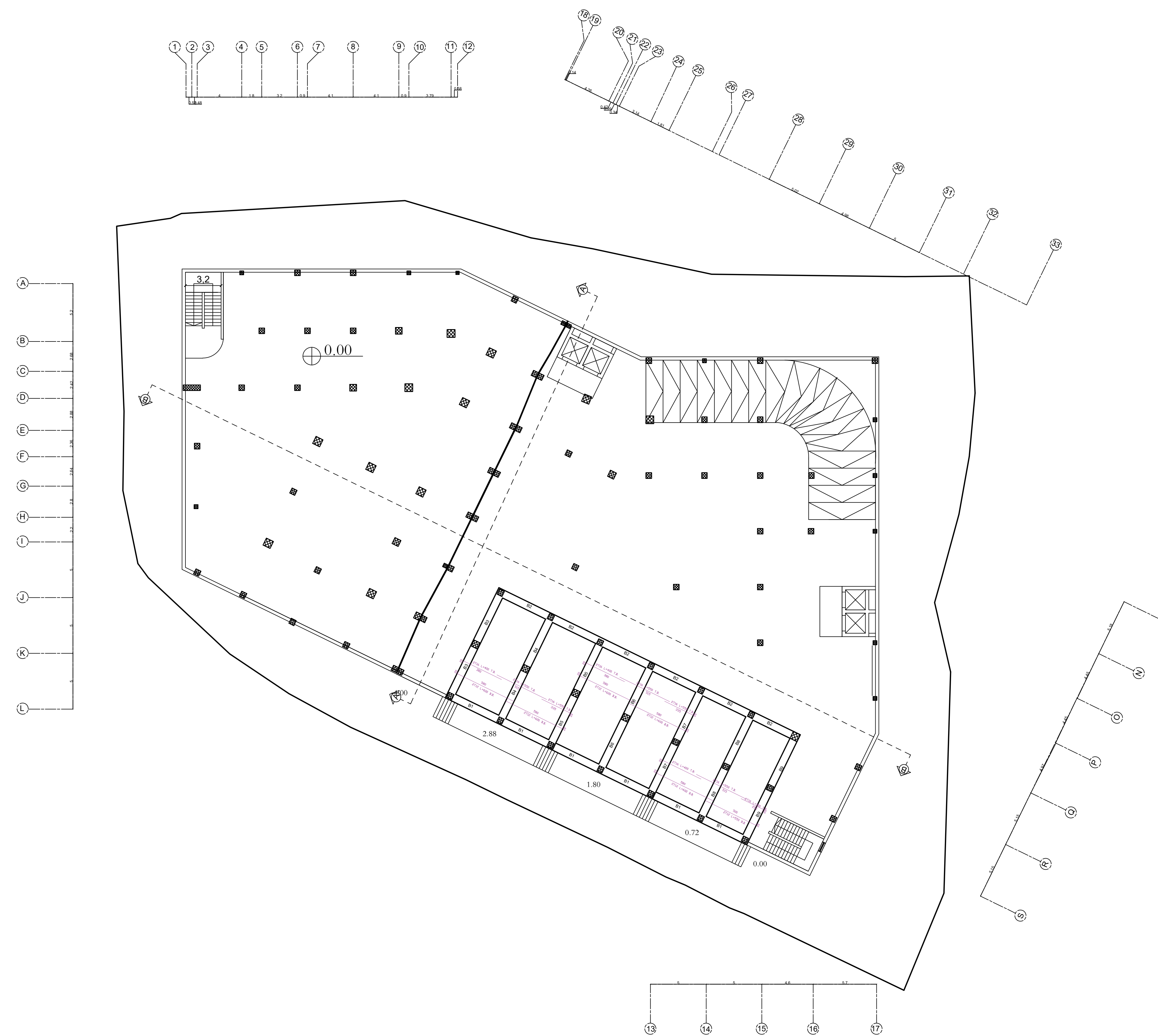
Supervisor :

Eng- shadi qumsiah

Designed by :

*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

<i>SCALE</i>	<i>No.of DRAW</i>
<i>1/200</i>	<i>529</i>



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DRAWING TITLE :

*Stories Reinforcement
Details*

Supervisor :

Eng- shadi qumsiah

Designed by :

*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

SCALE

No. of DRAW

1/200

530



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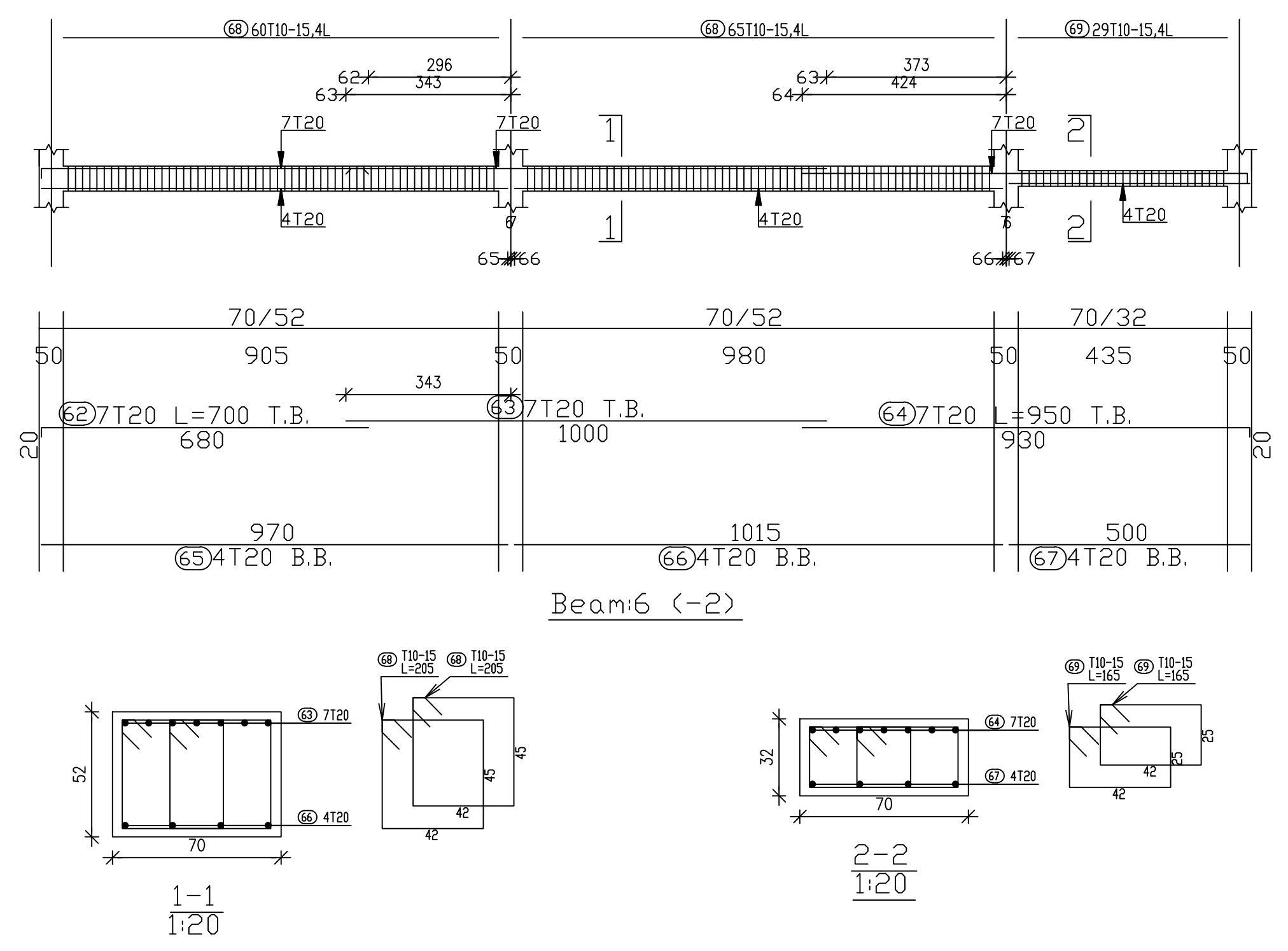
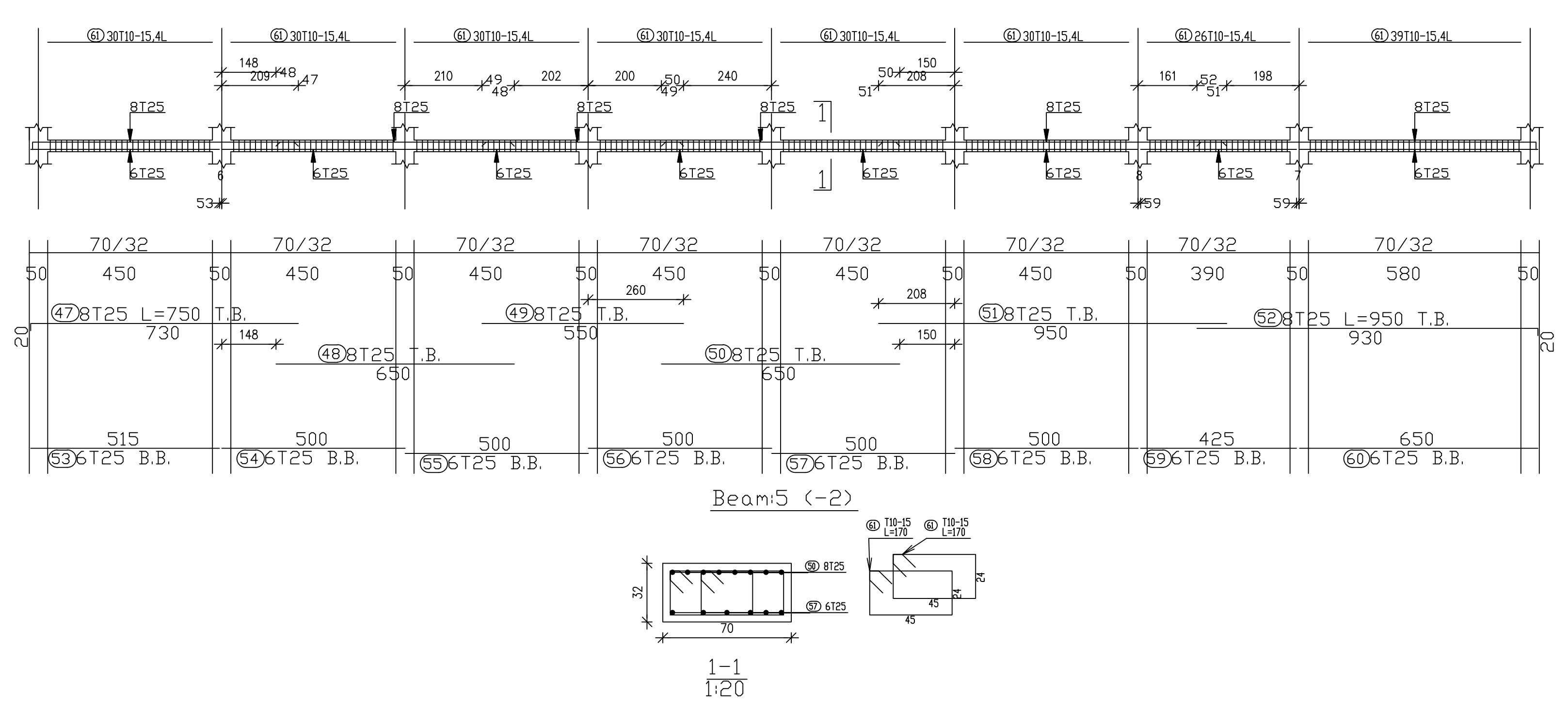
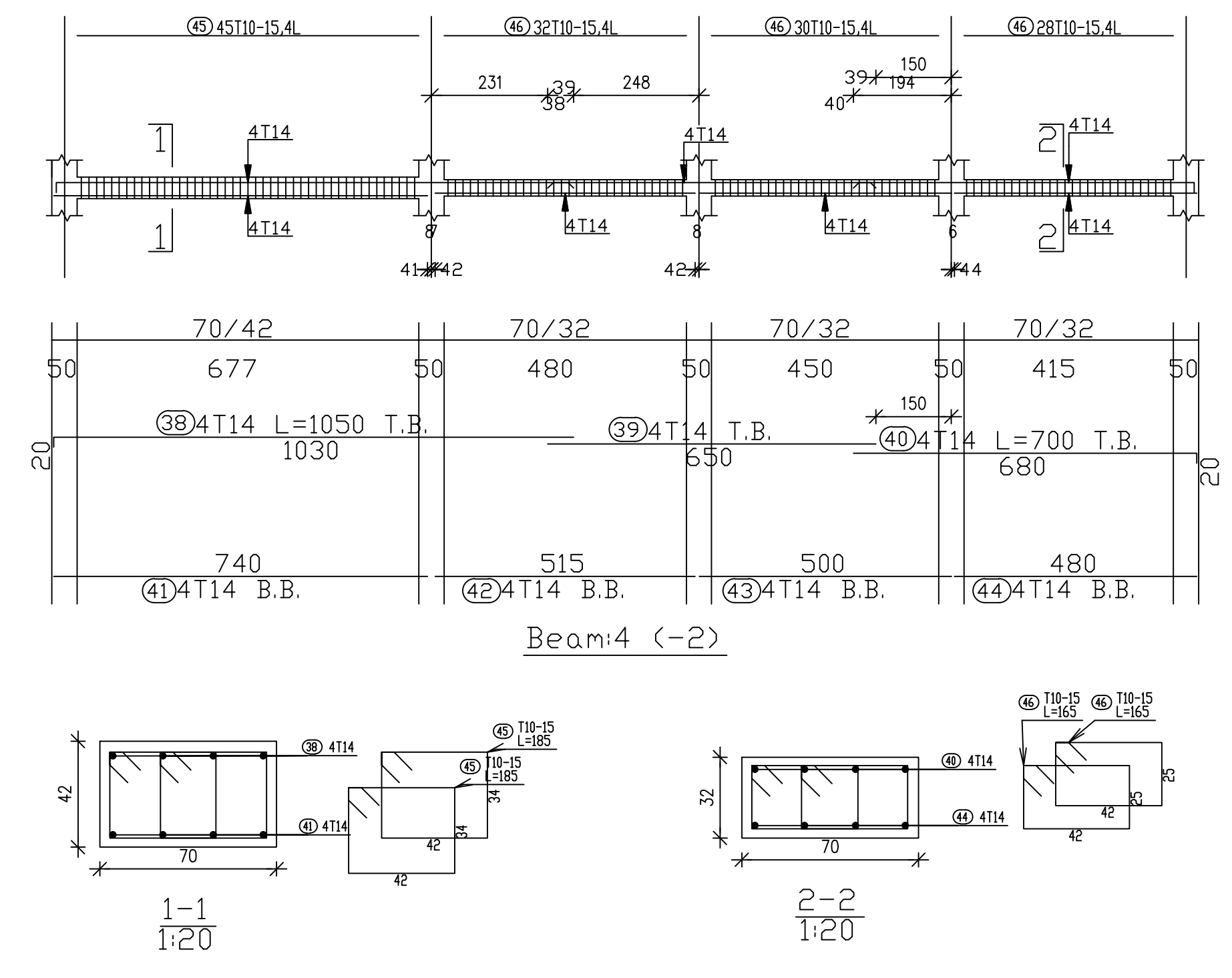
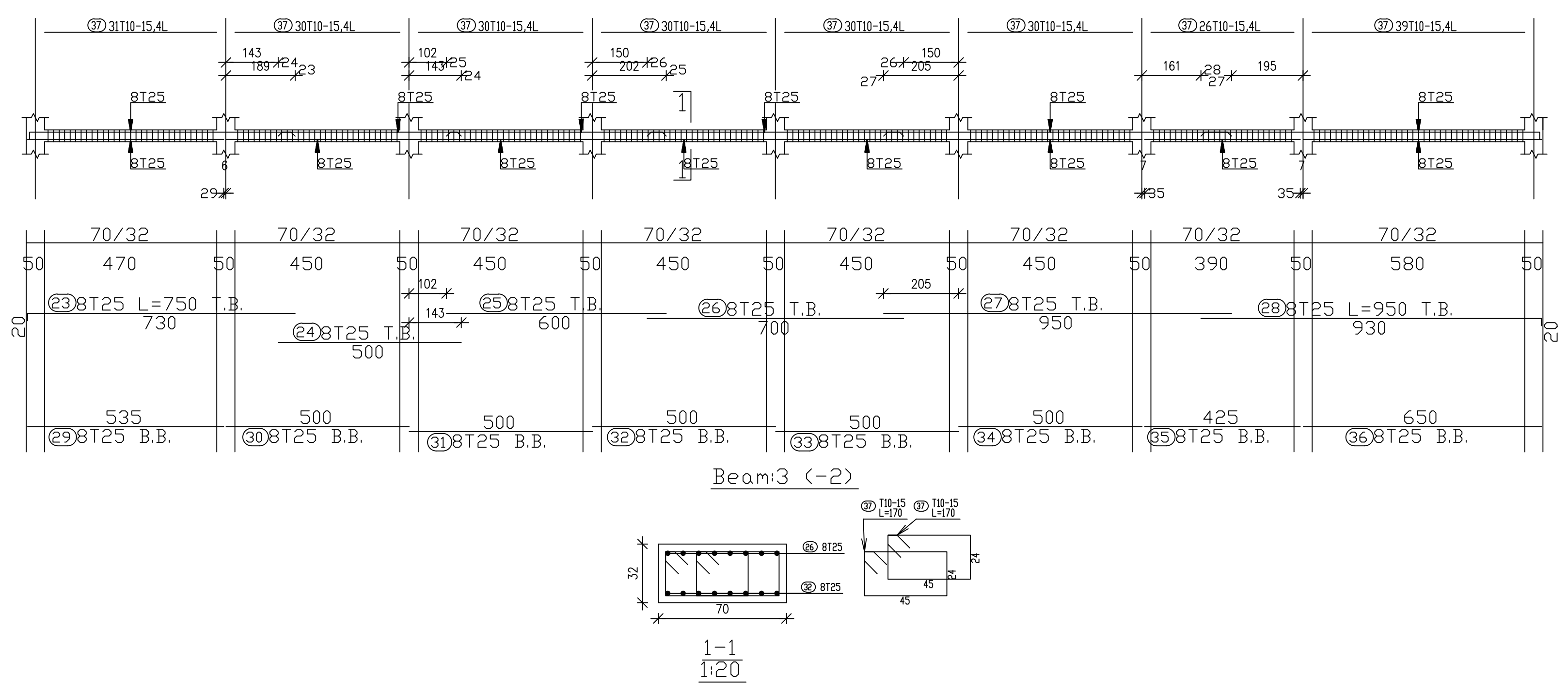
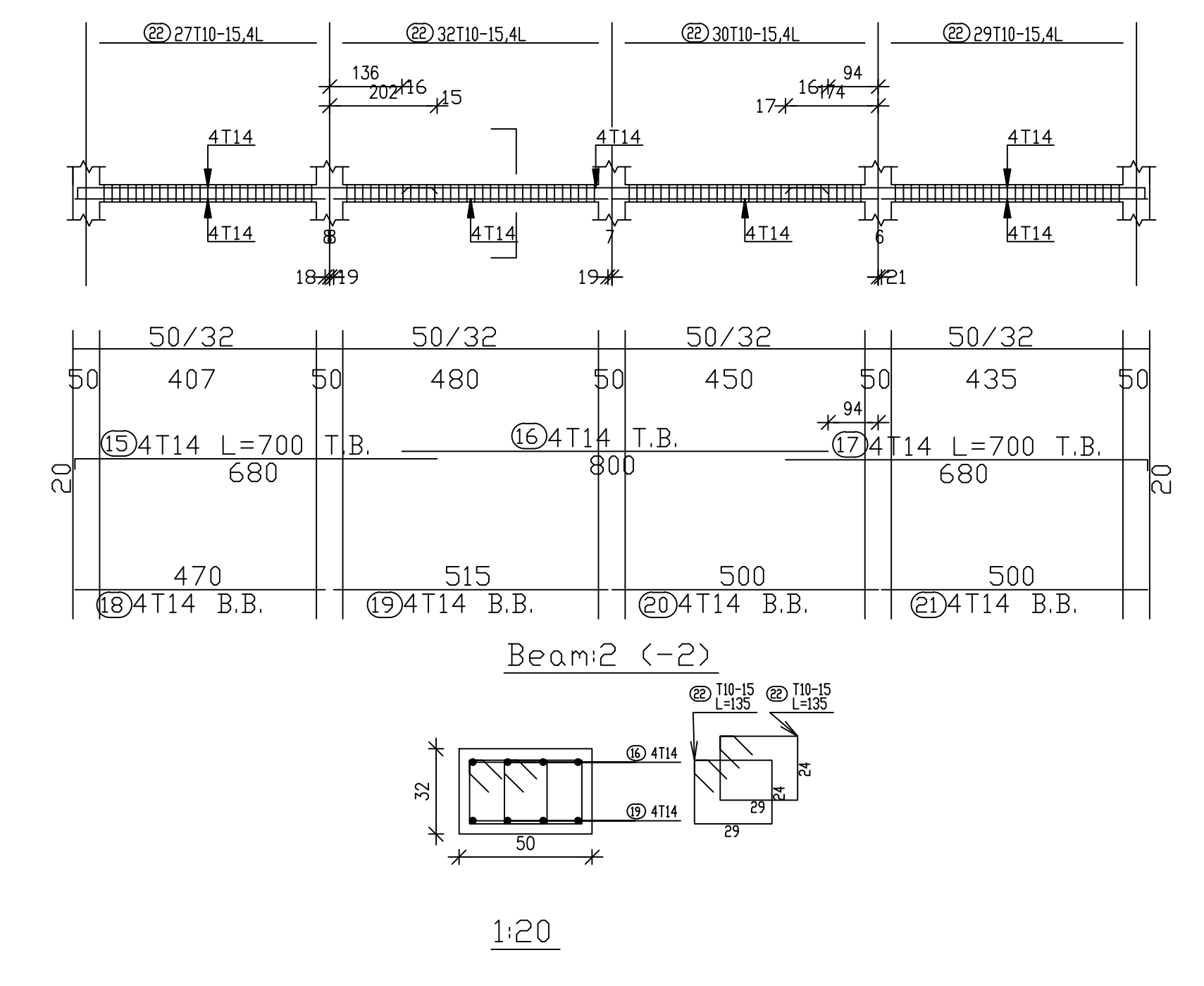
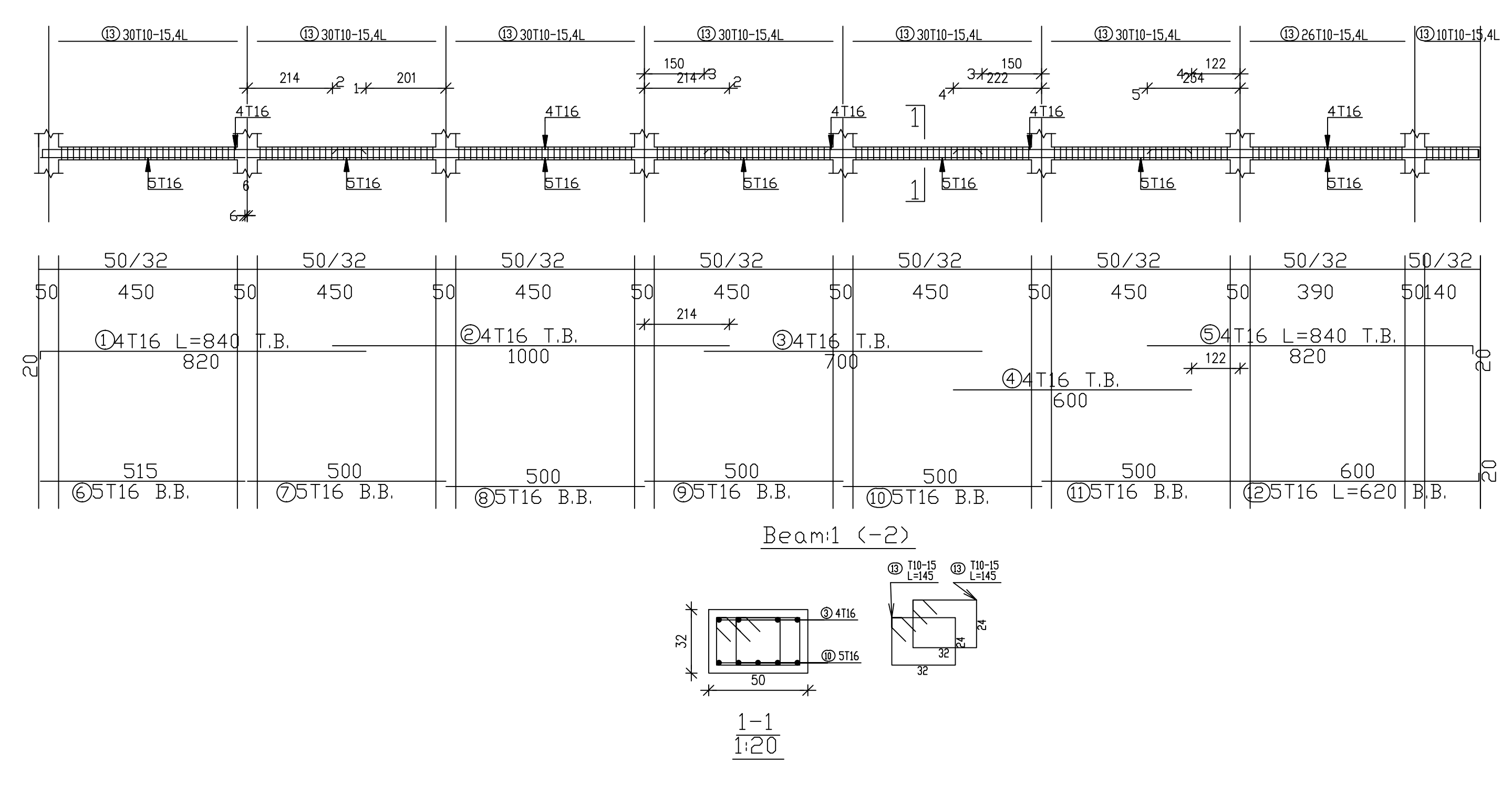
Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah
Designed by :
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	531





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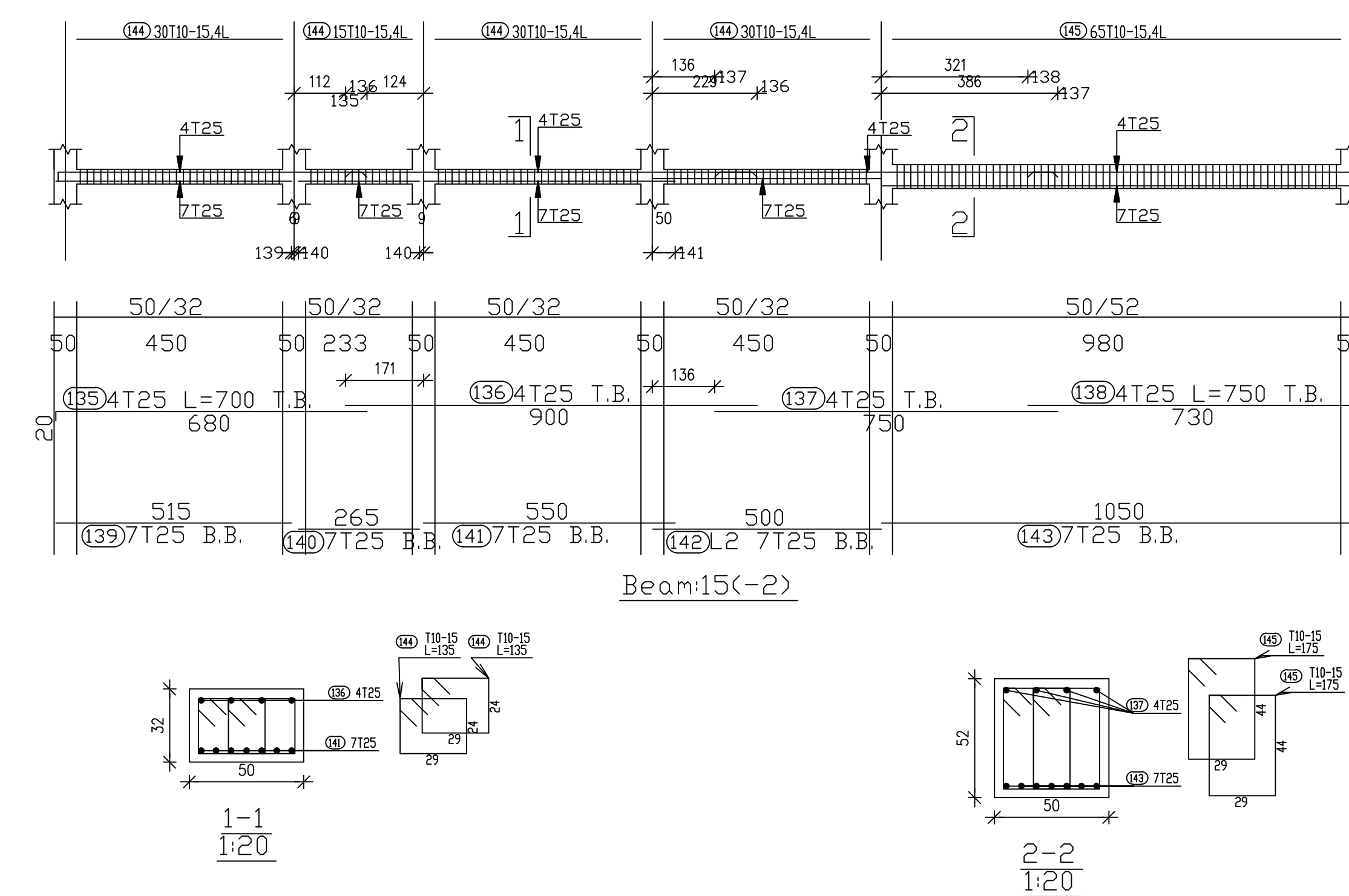
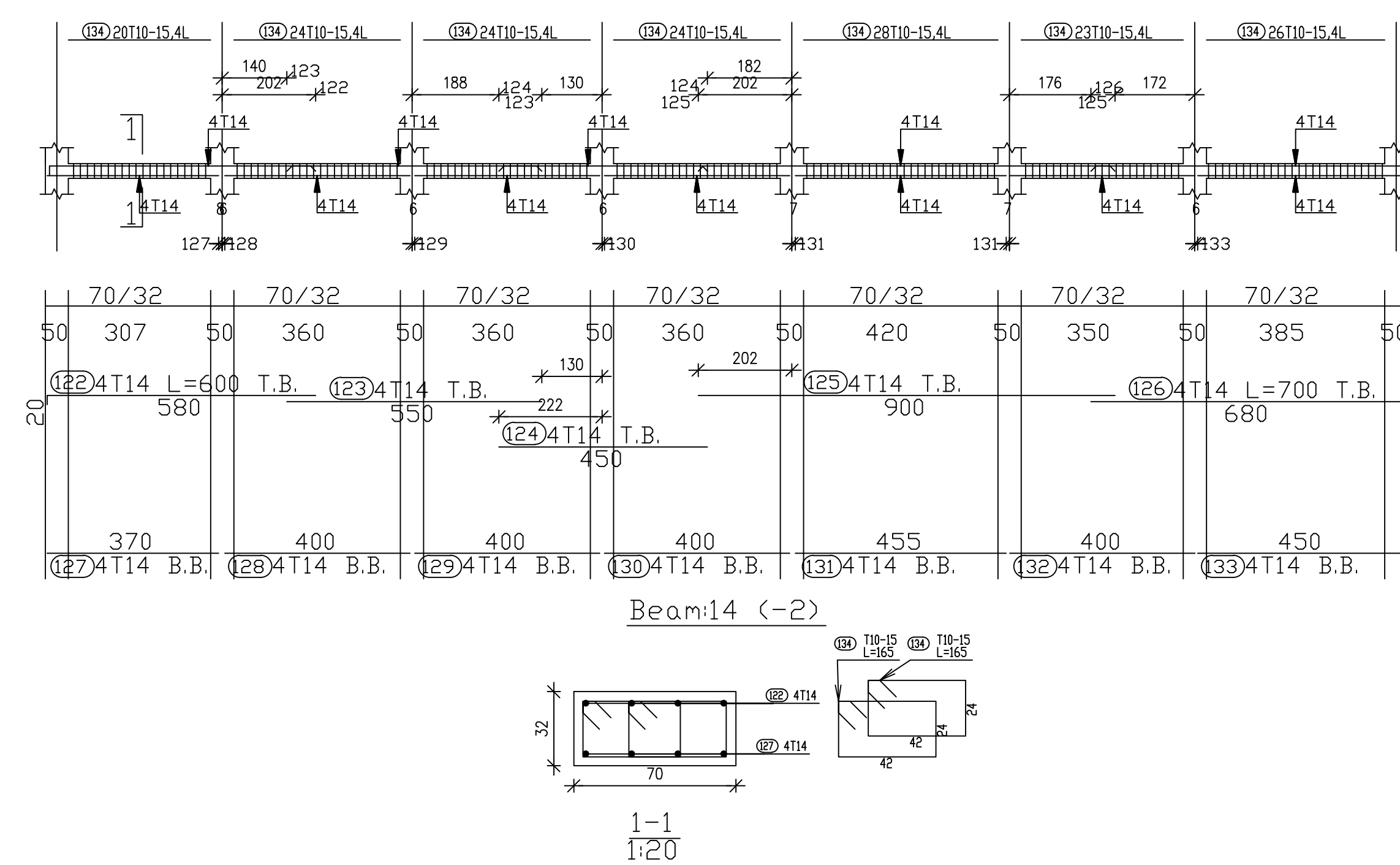
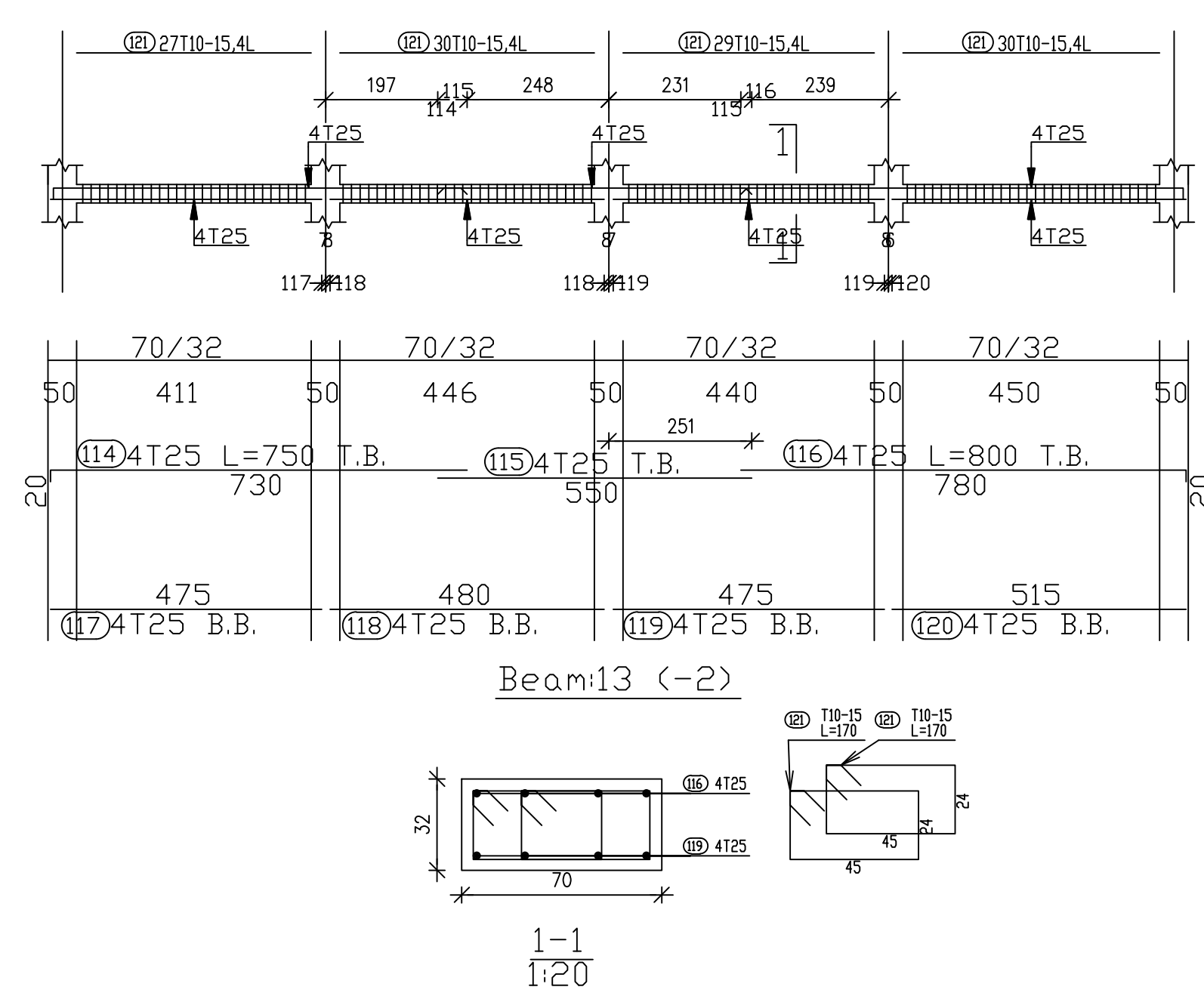
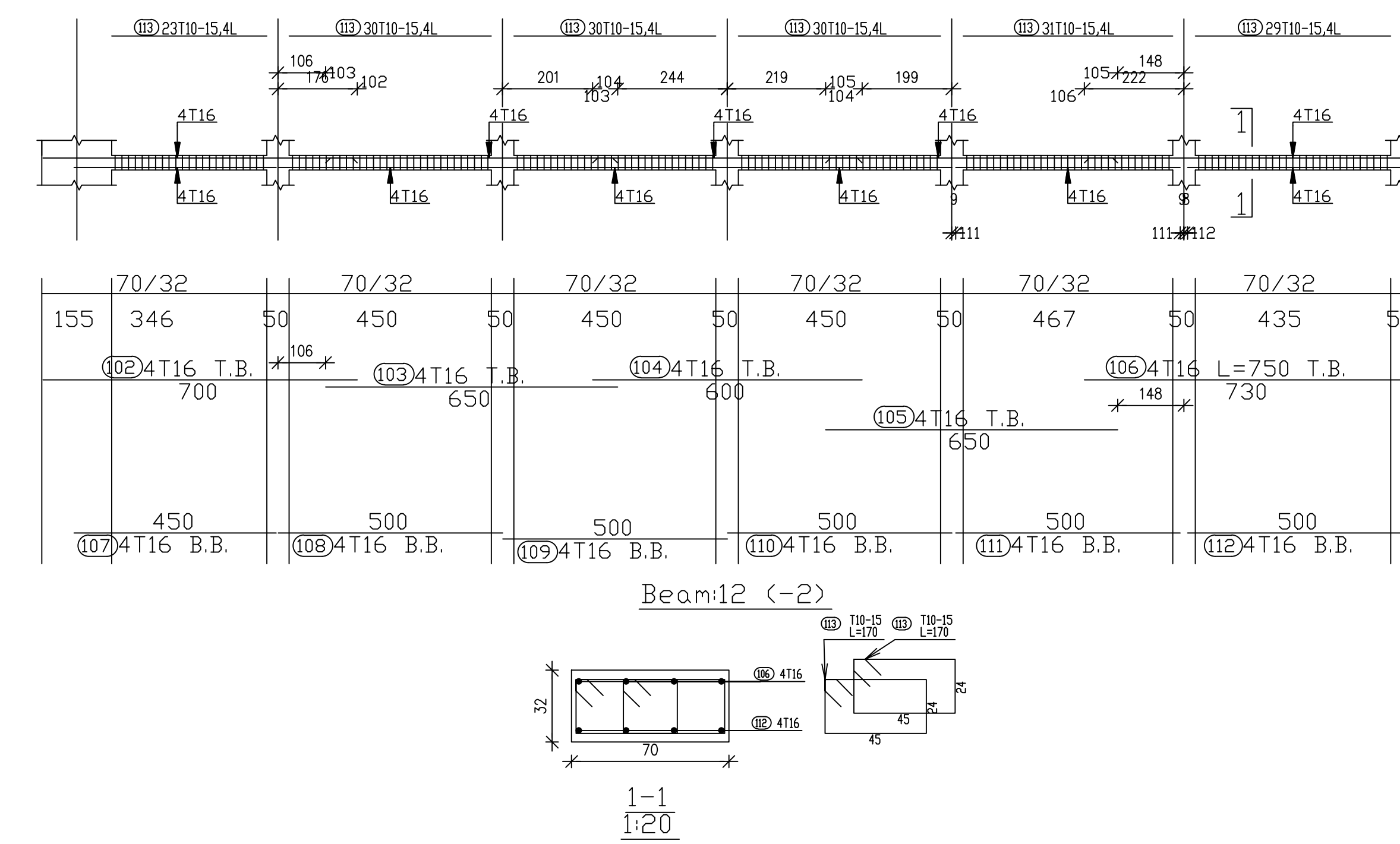
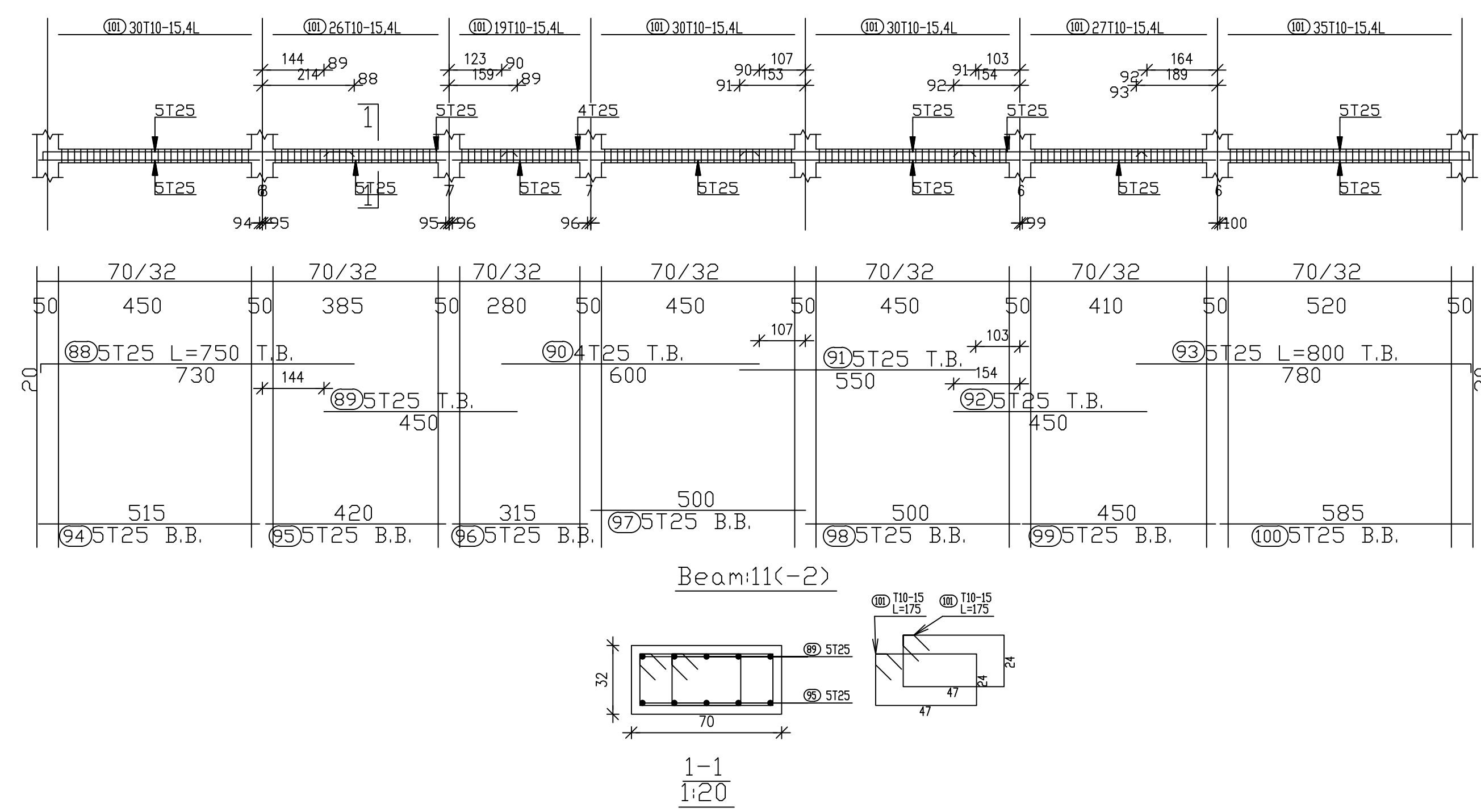
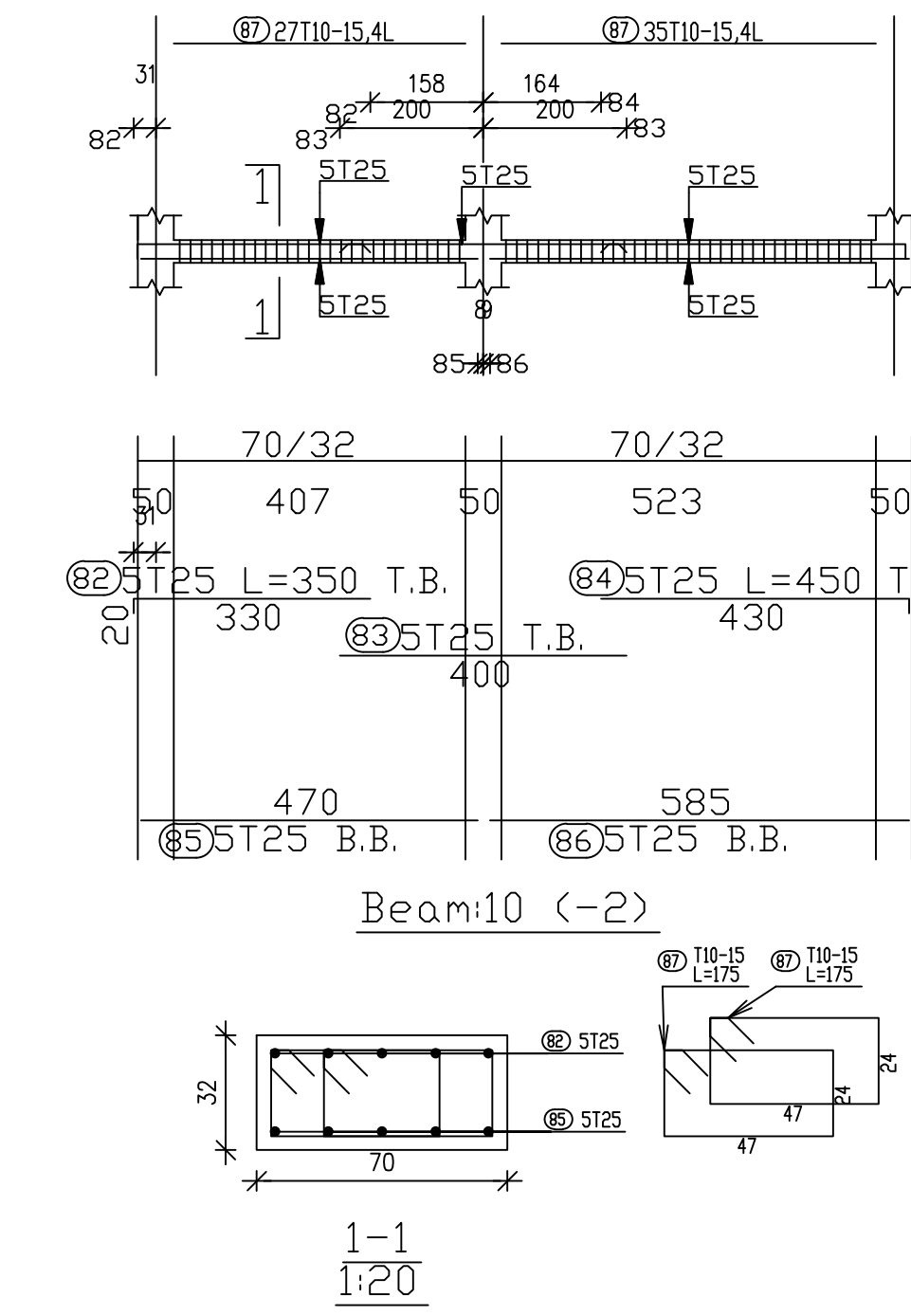
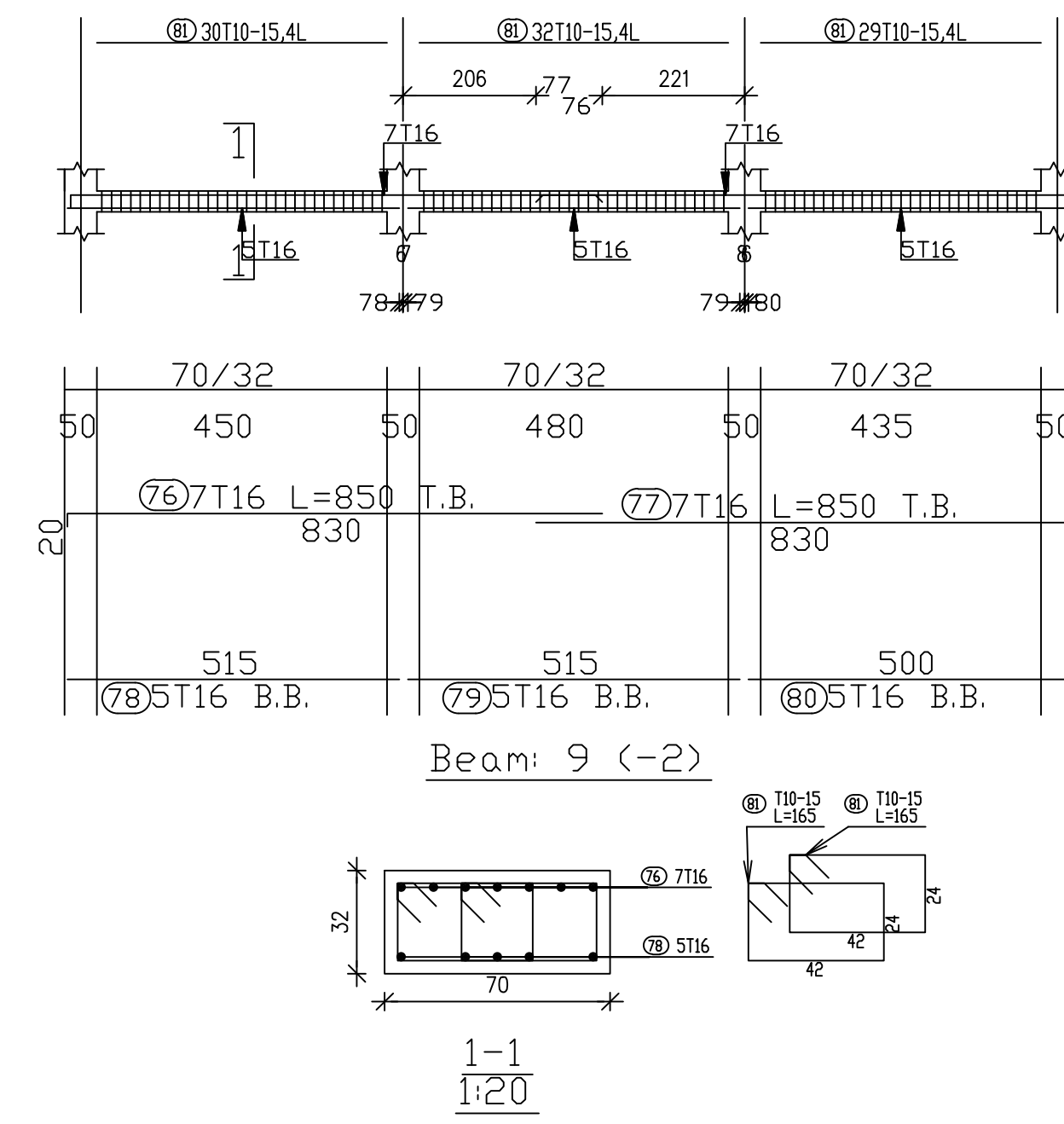
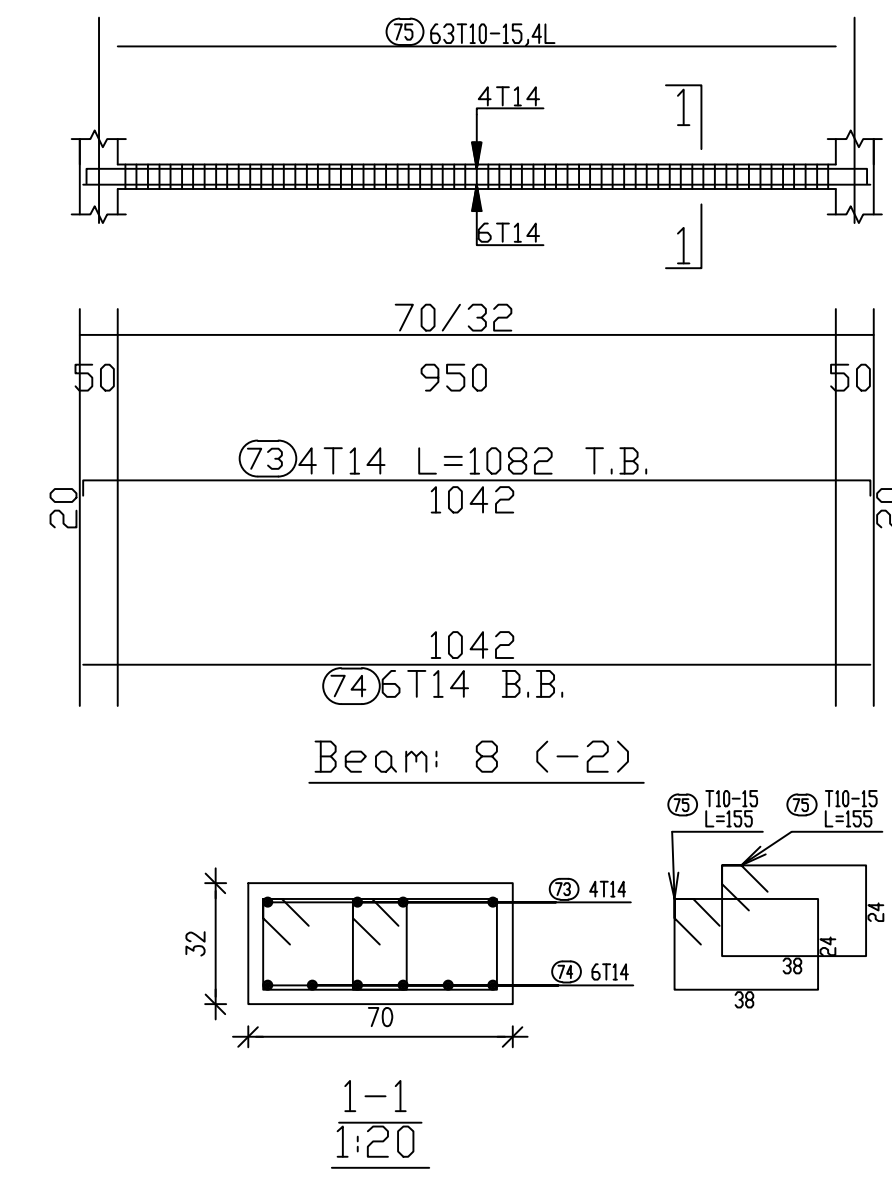
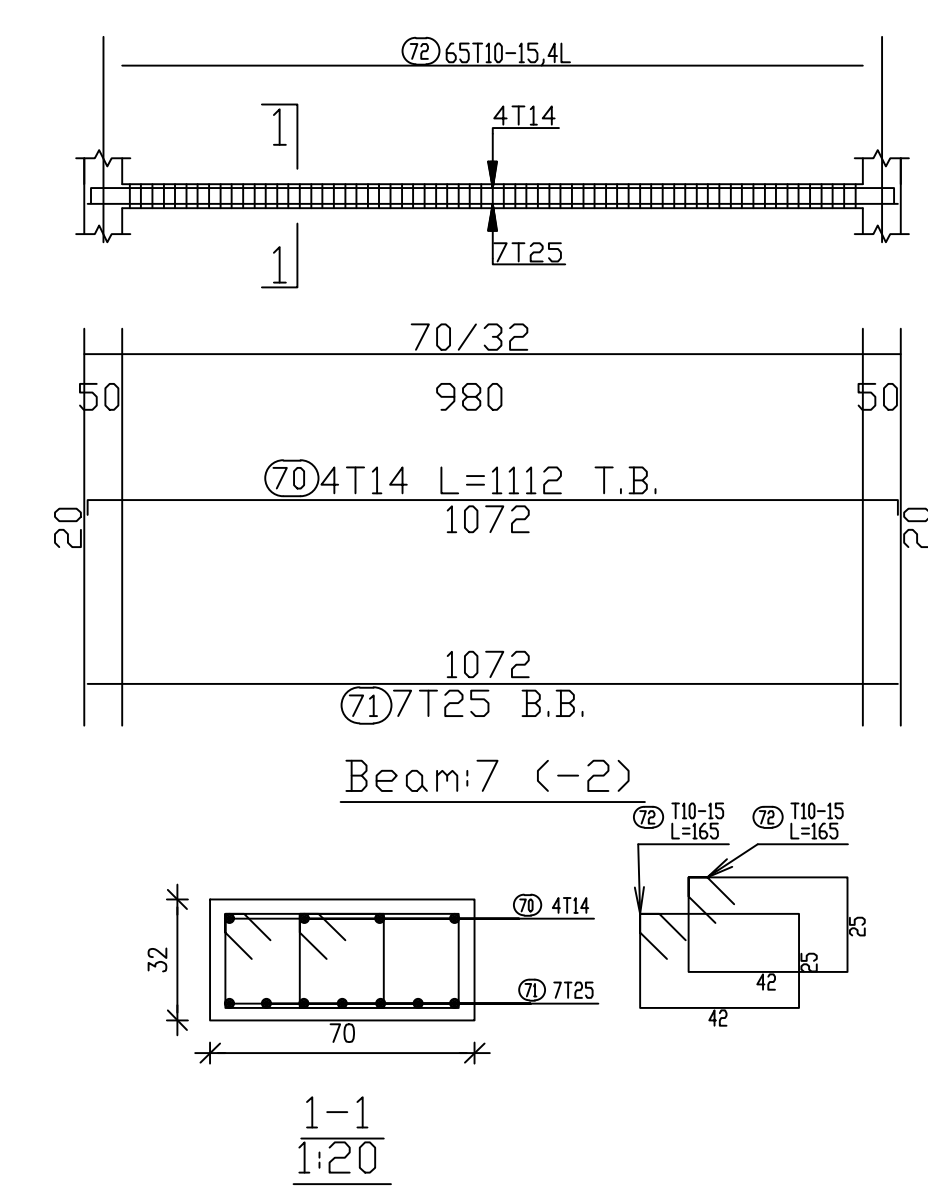
DRAWING TITLE :
BEAMS DETAILS

Supervisor :

Eng- shadi qumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

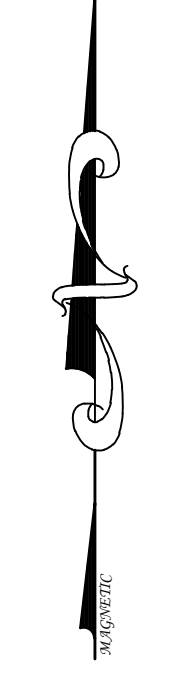


SCALE

1/200

No. of DRAW

532



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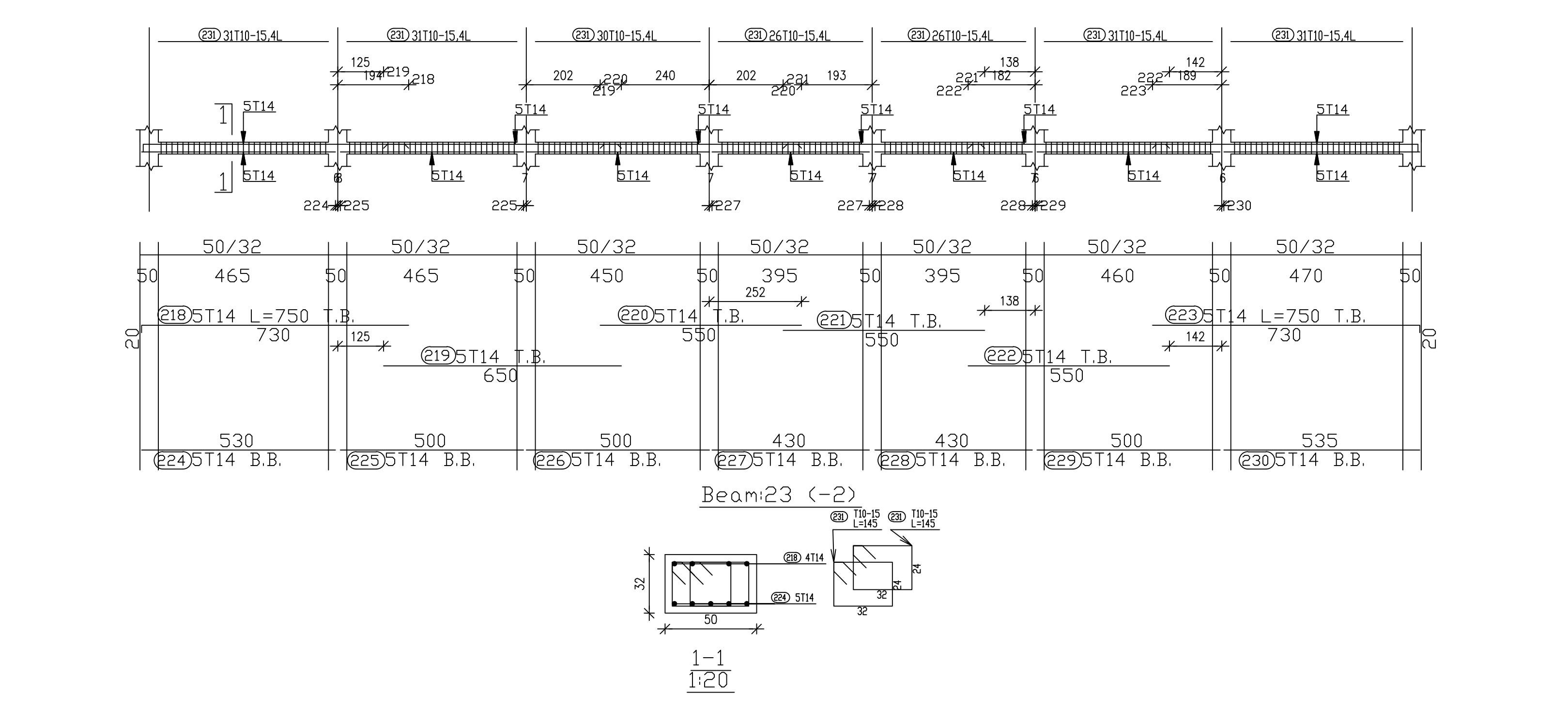
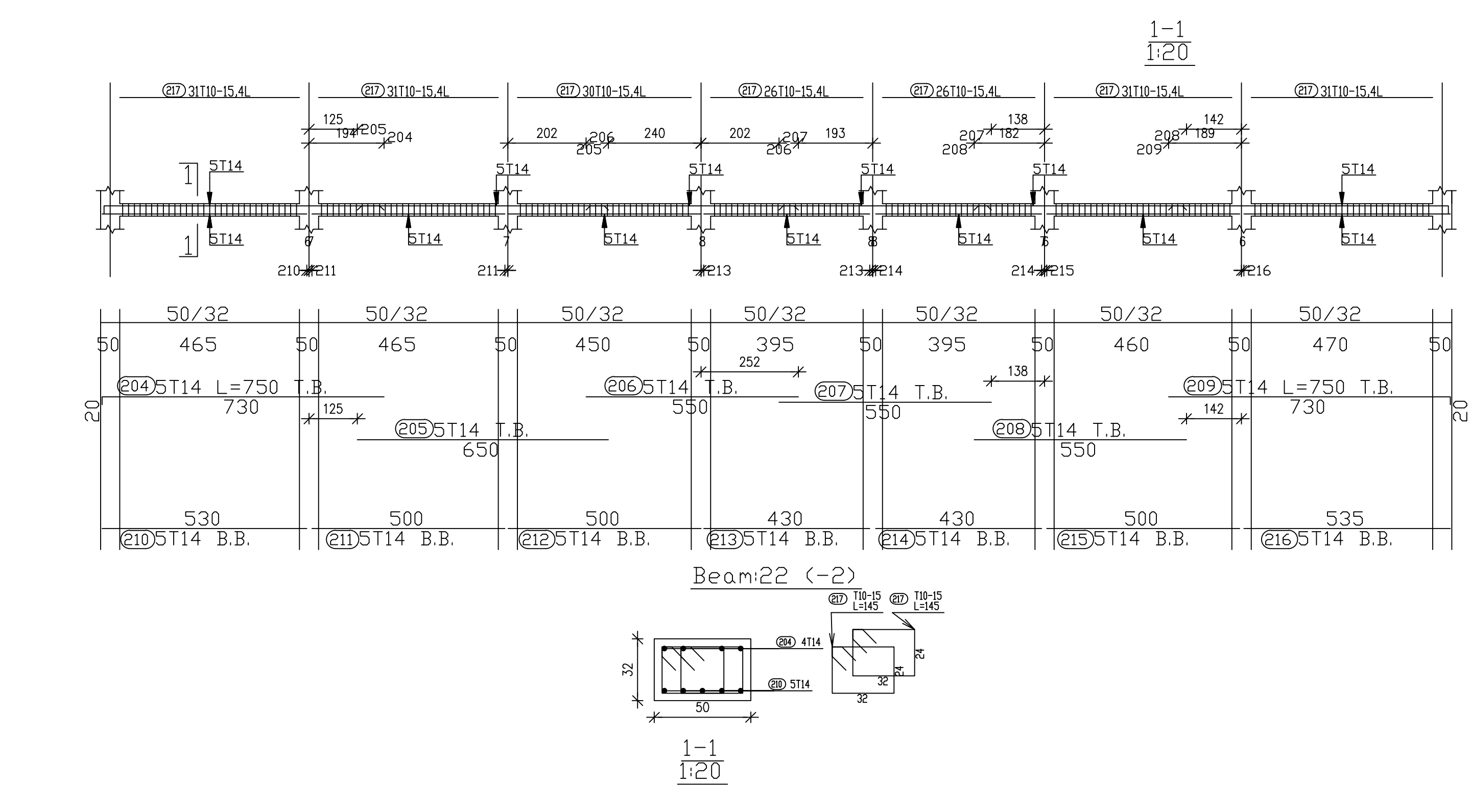
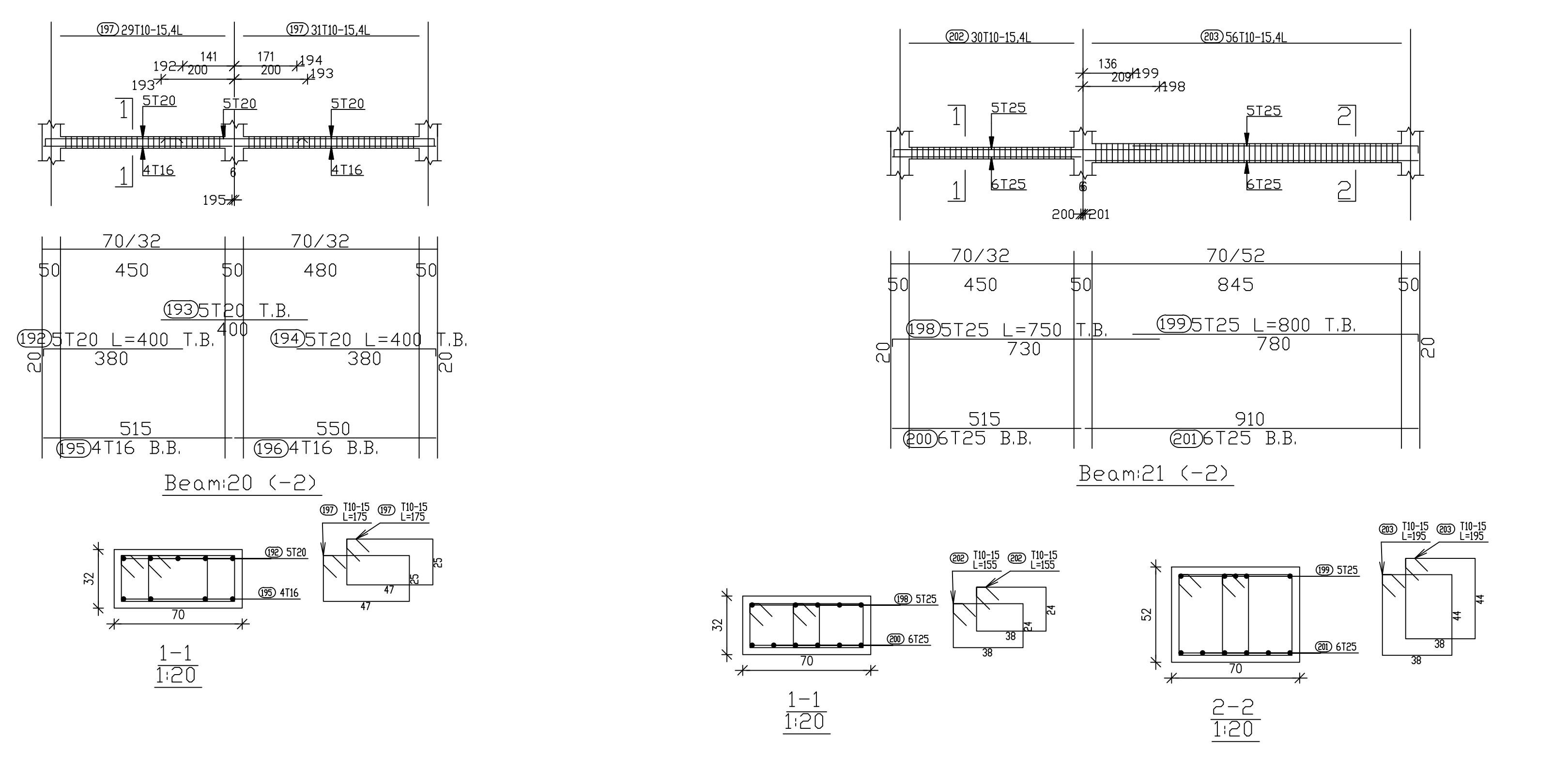
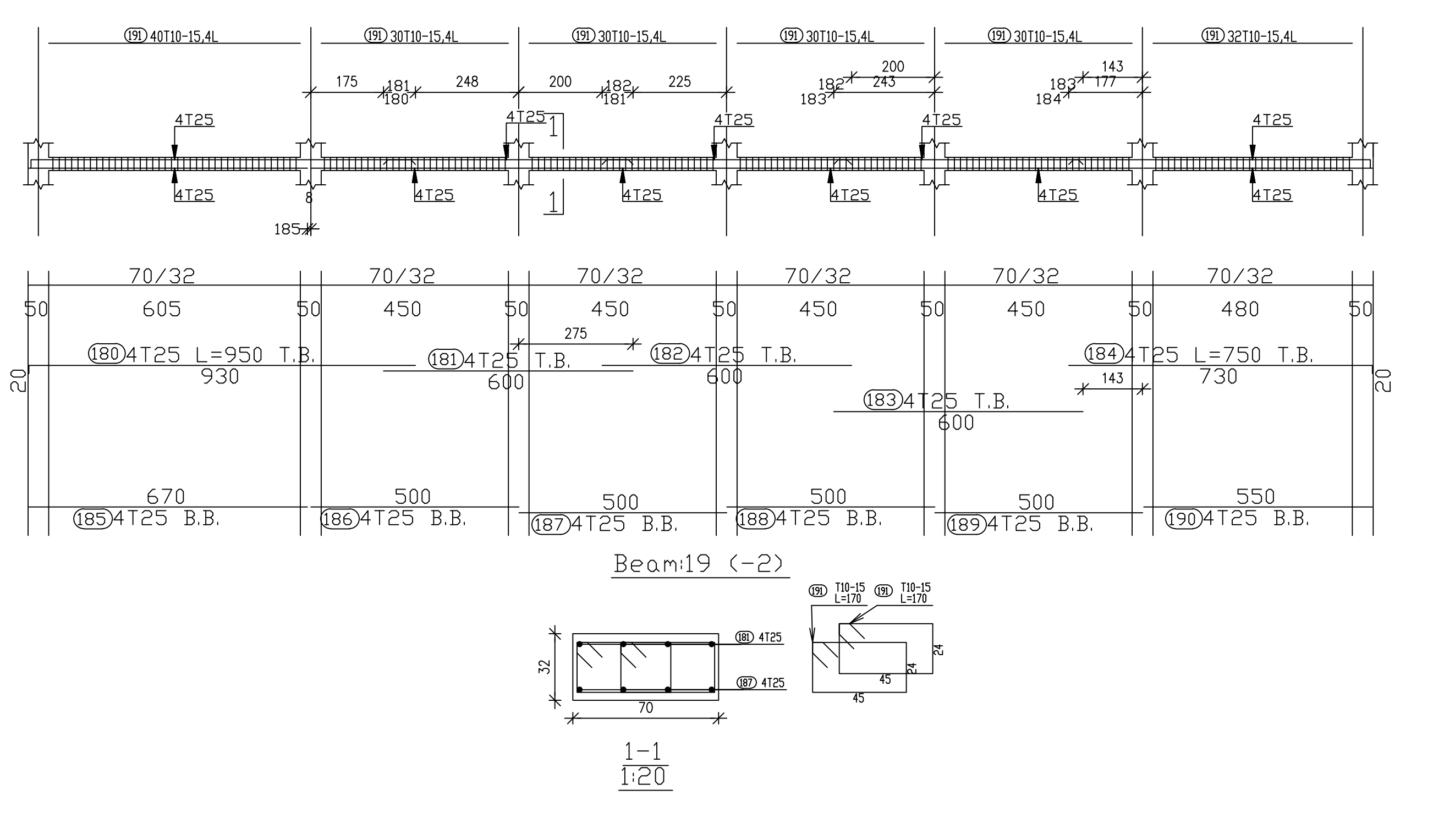
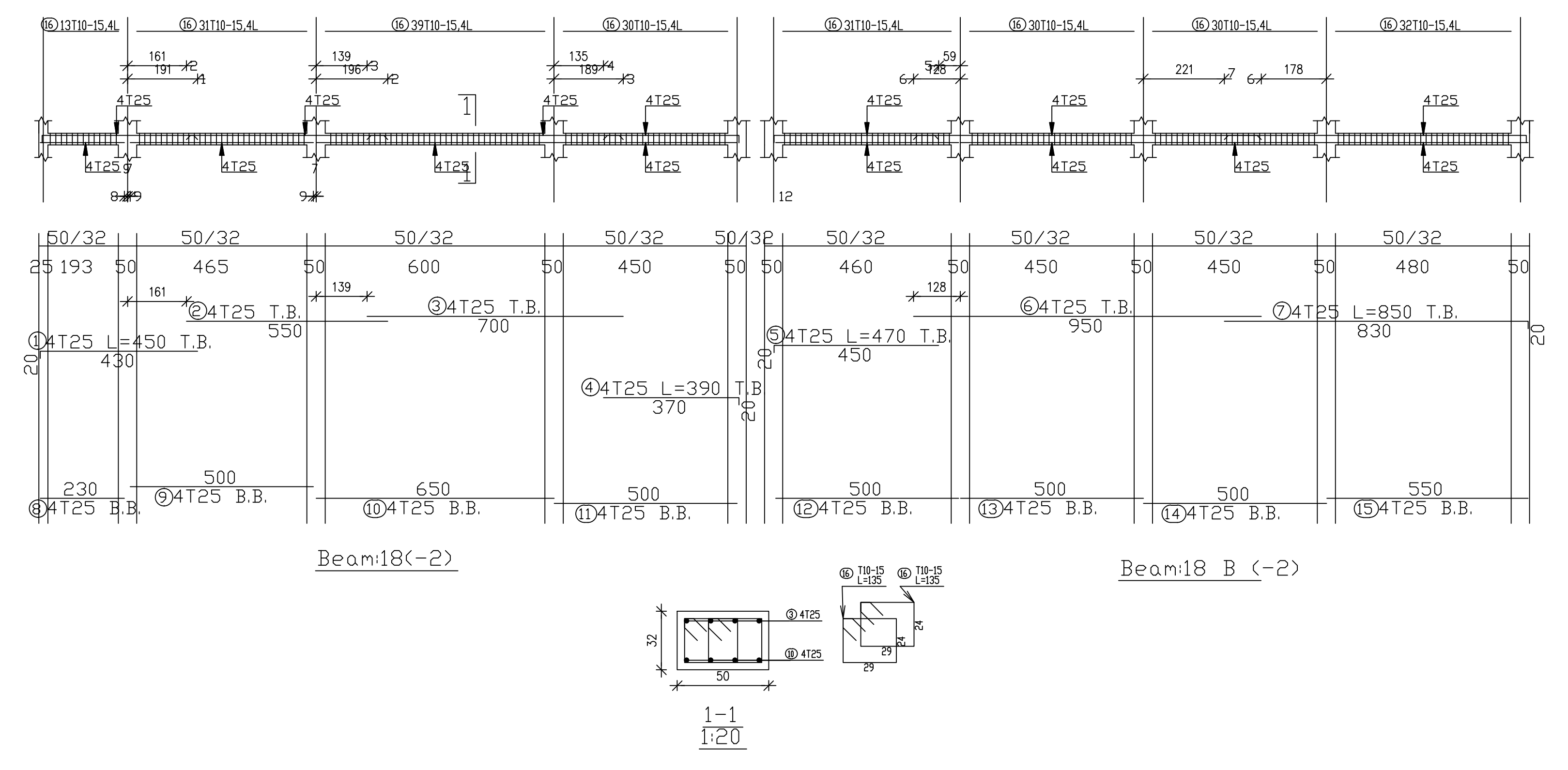
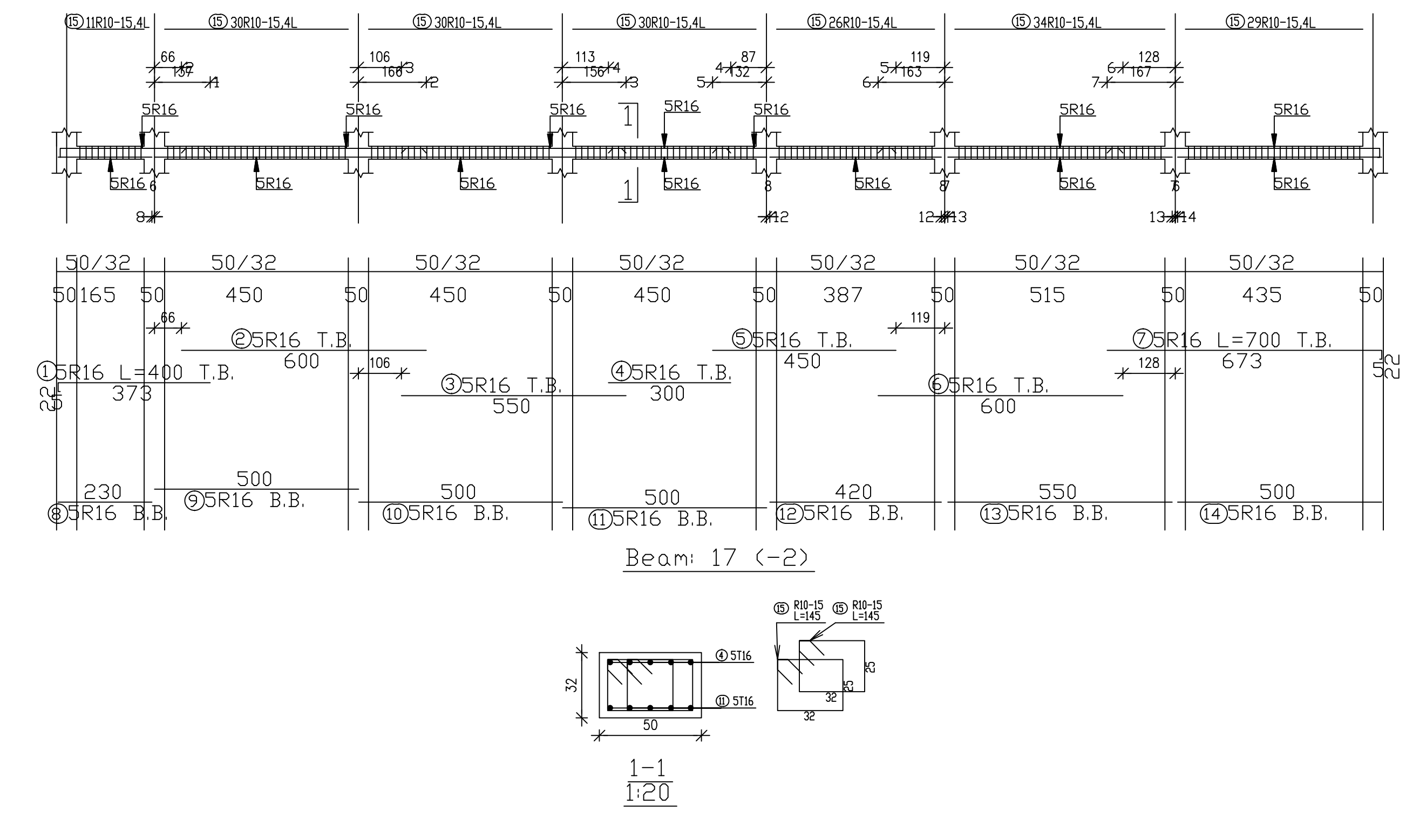
Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah
Designed by :
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	533





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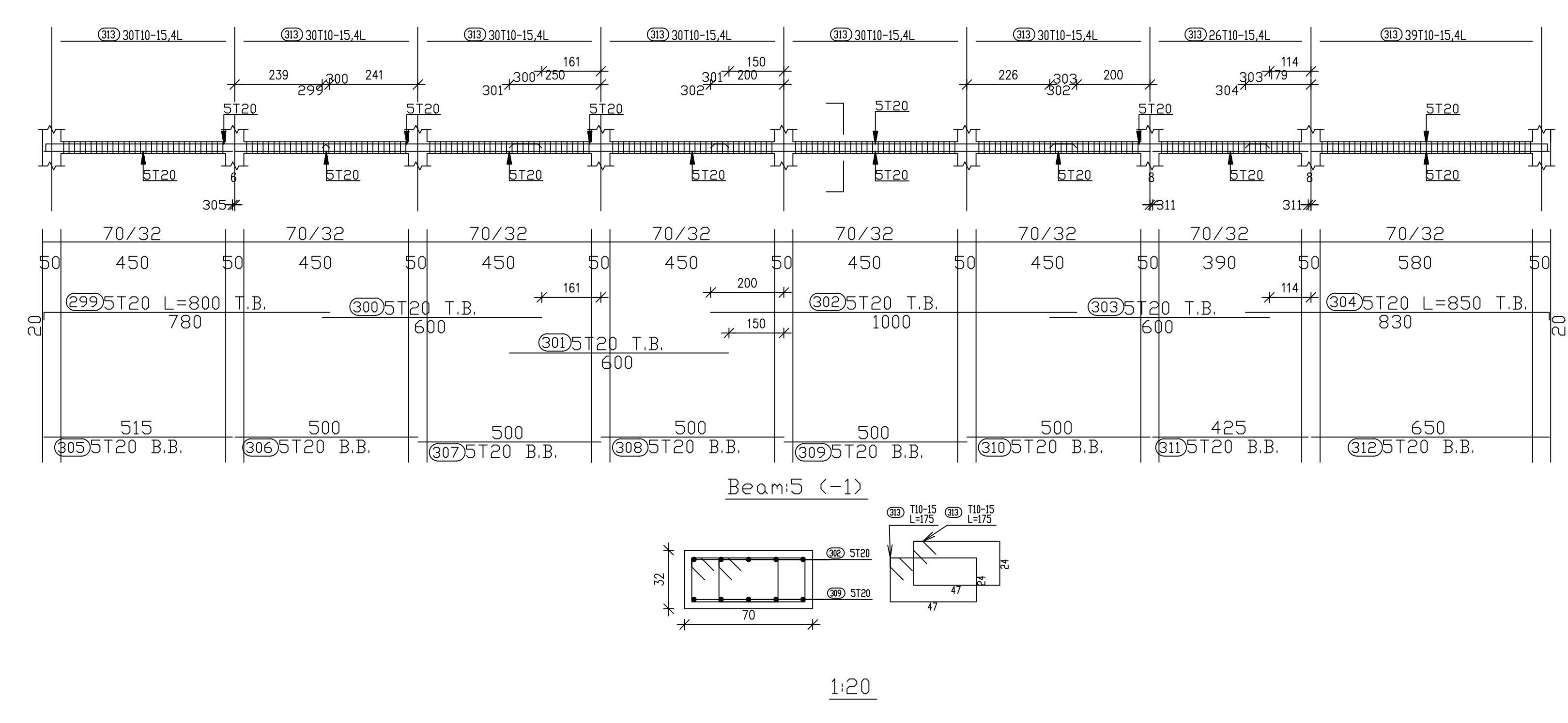
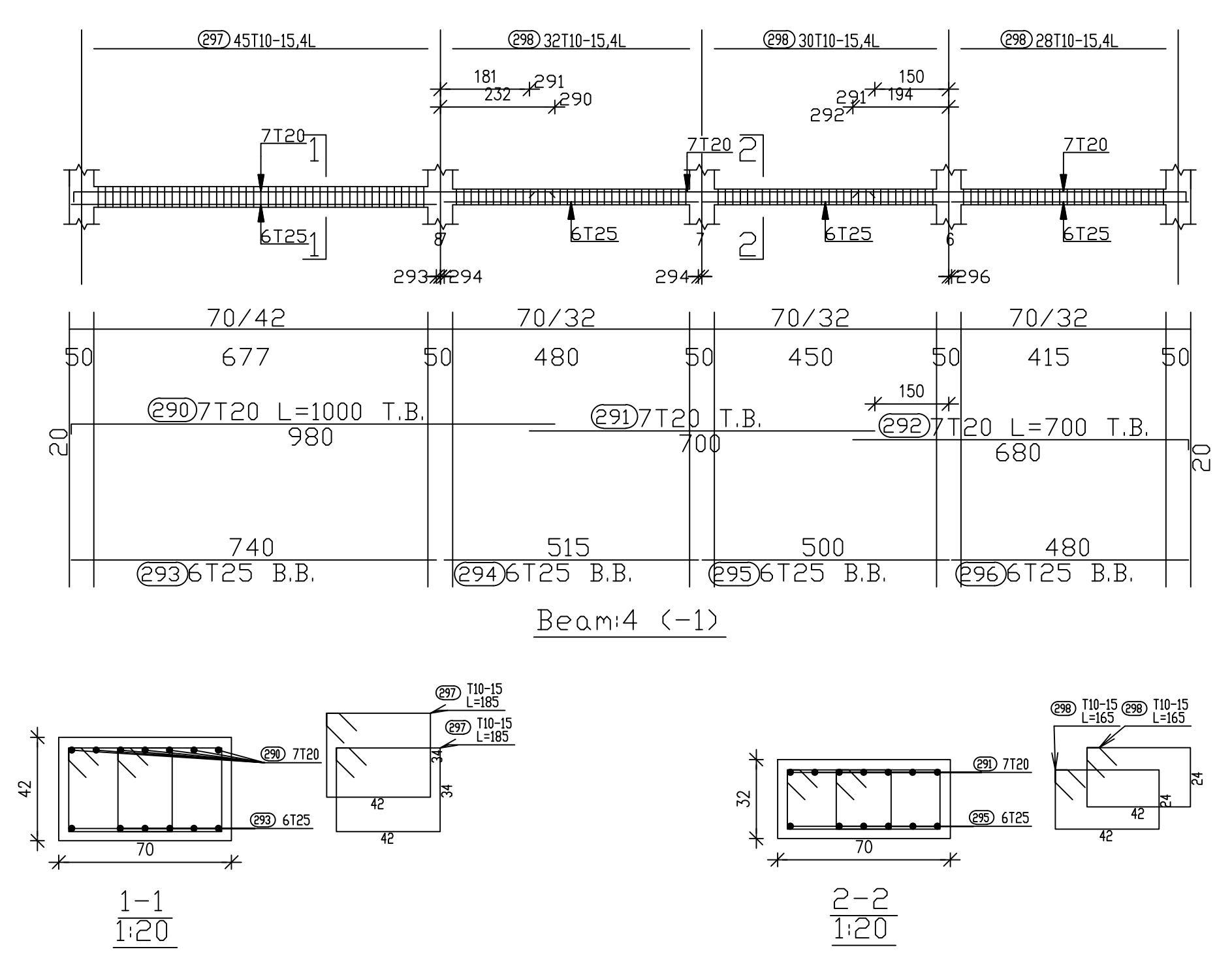
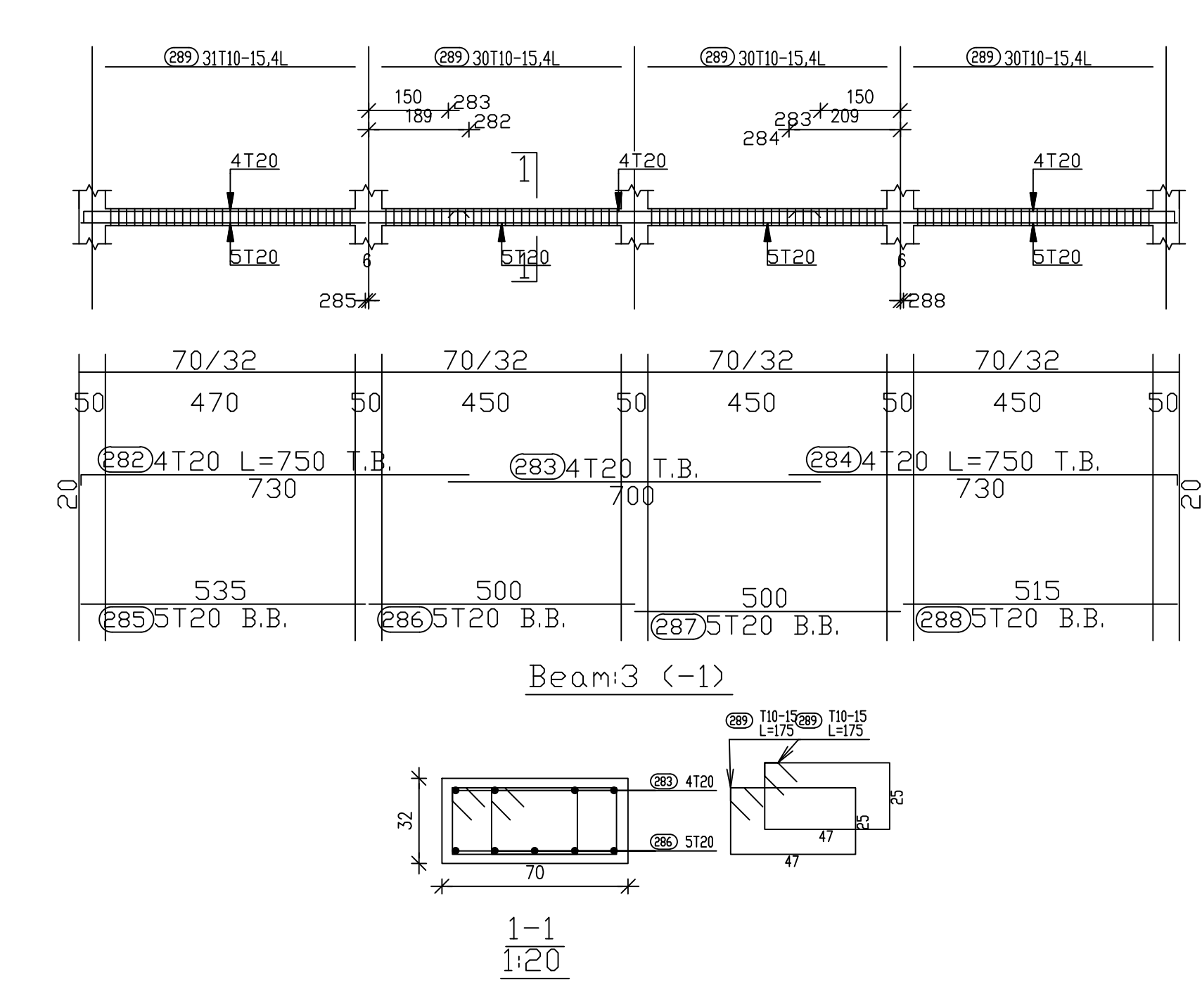
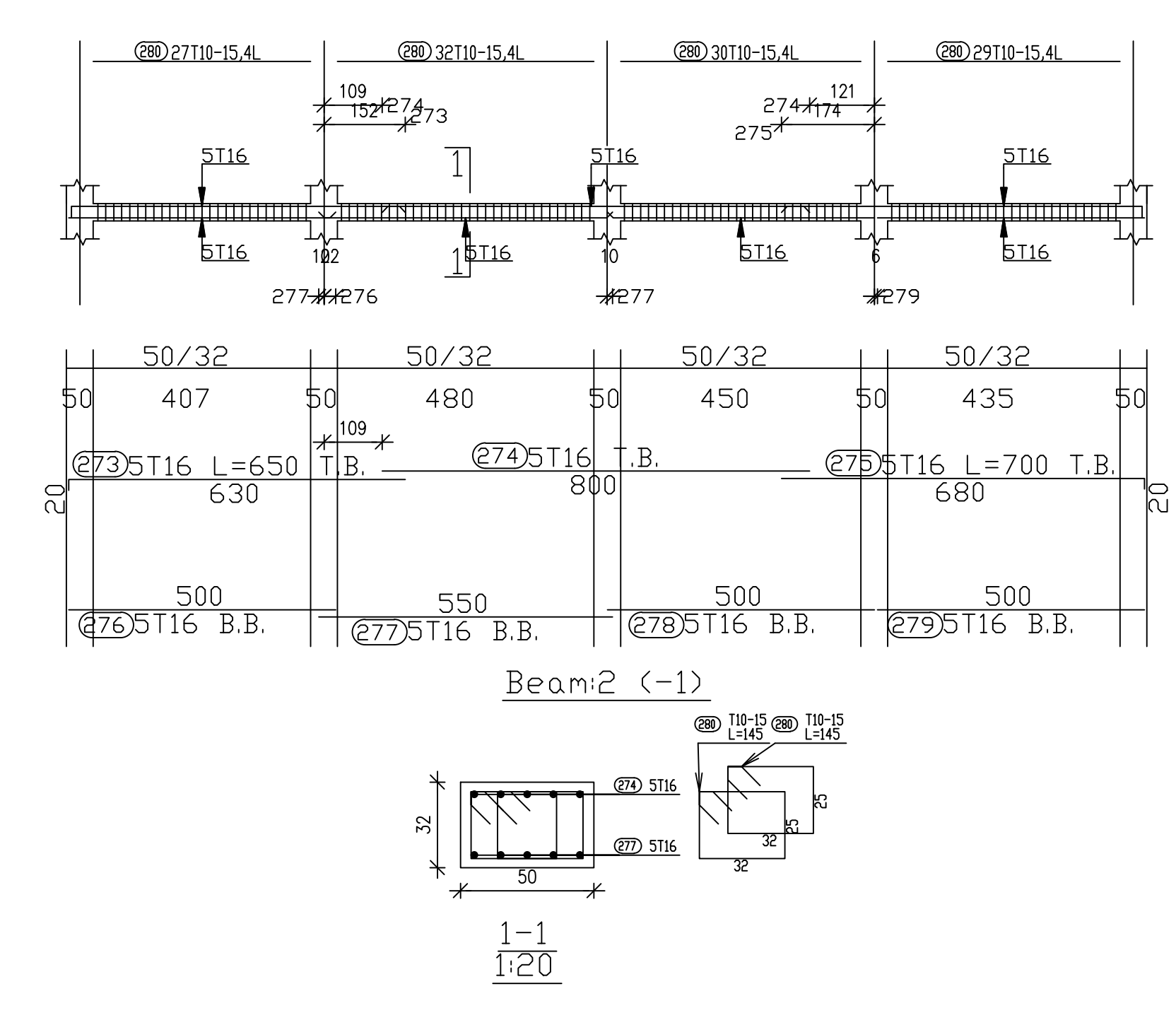
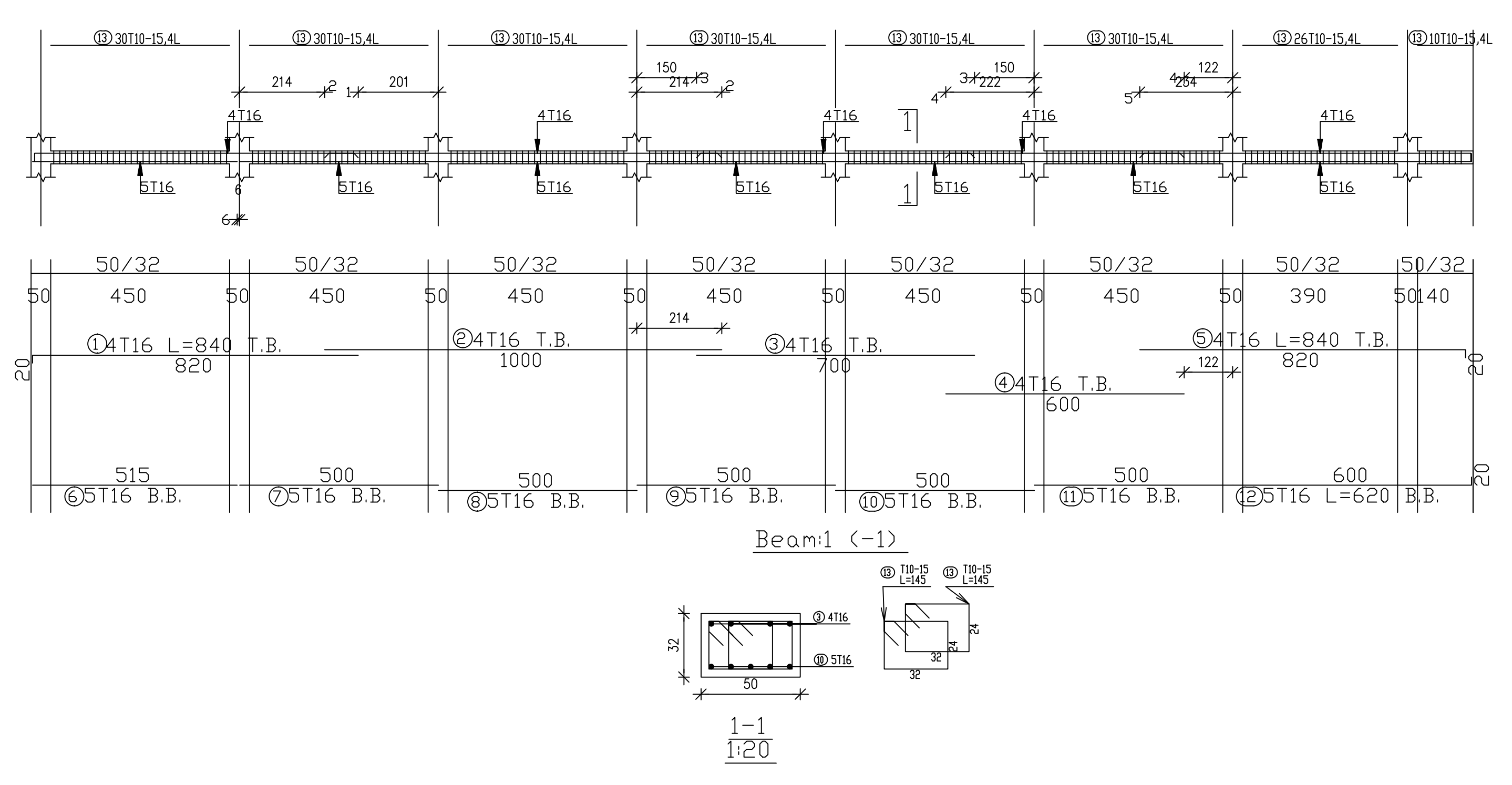
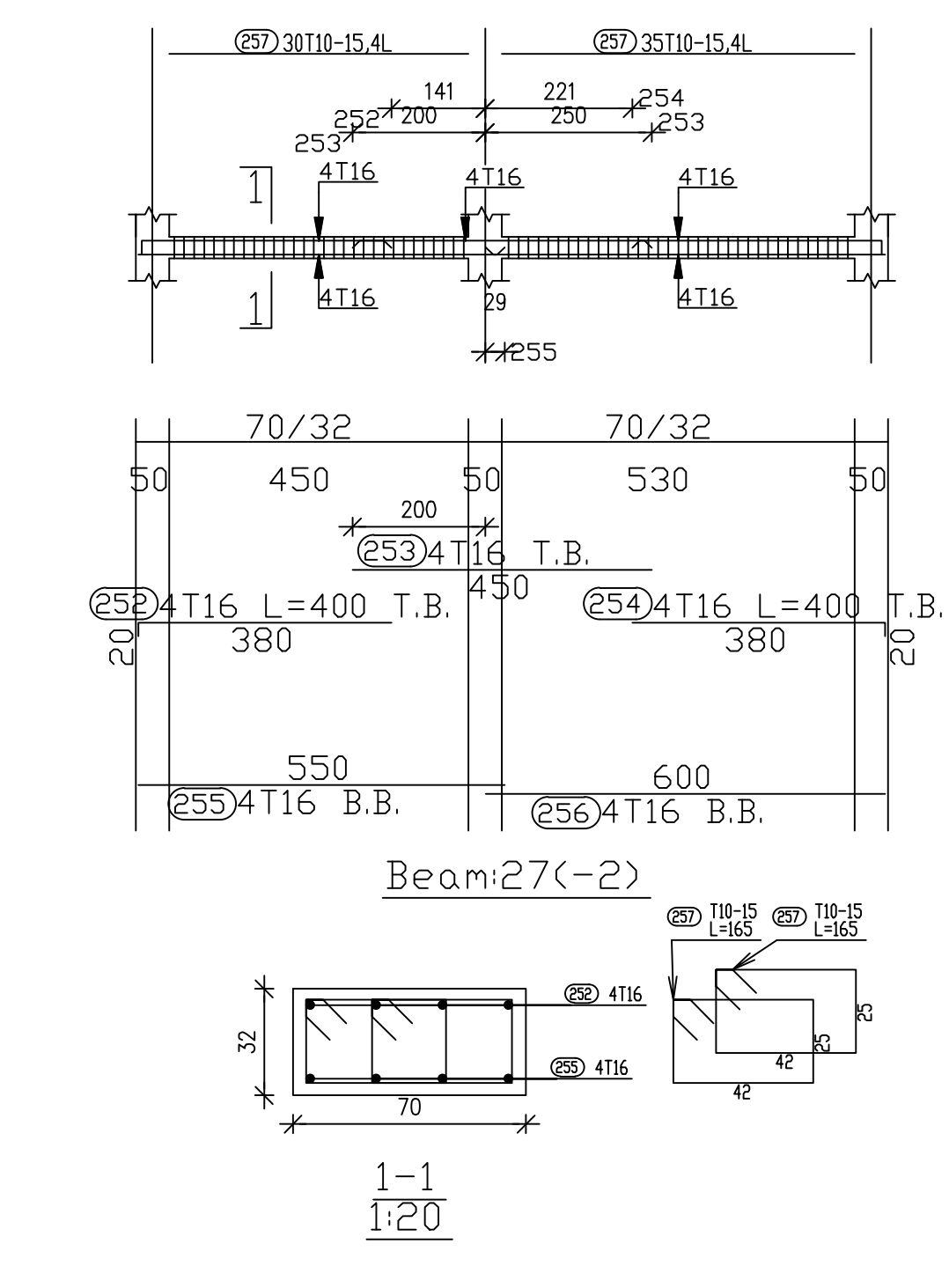
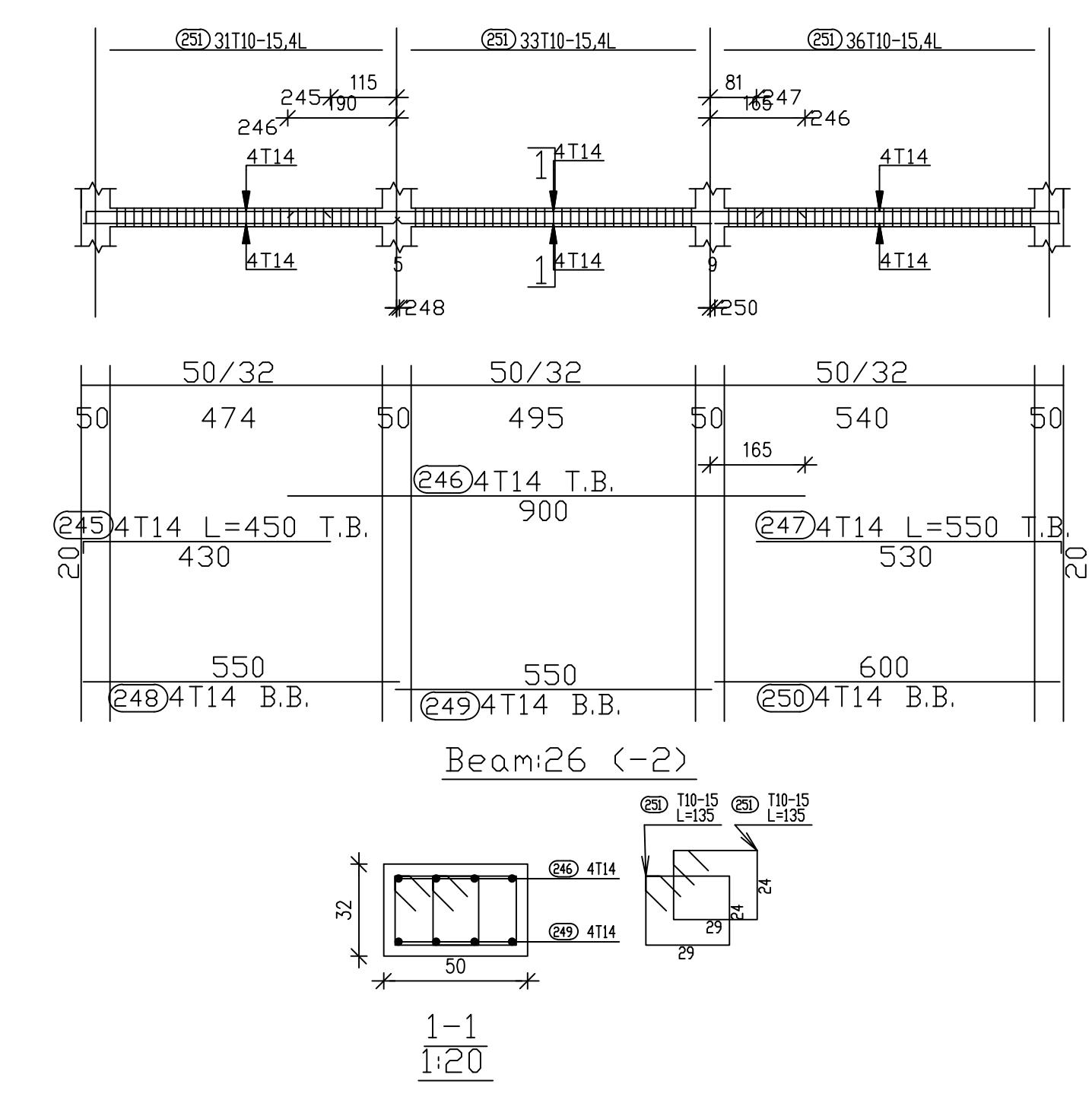
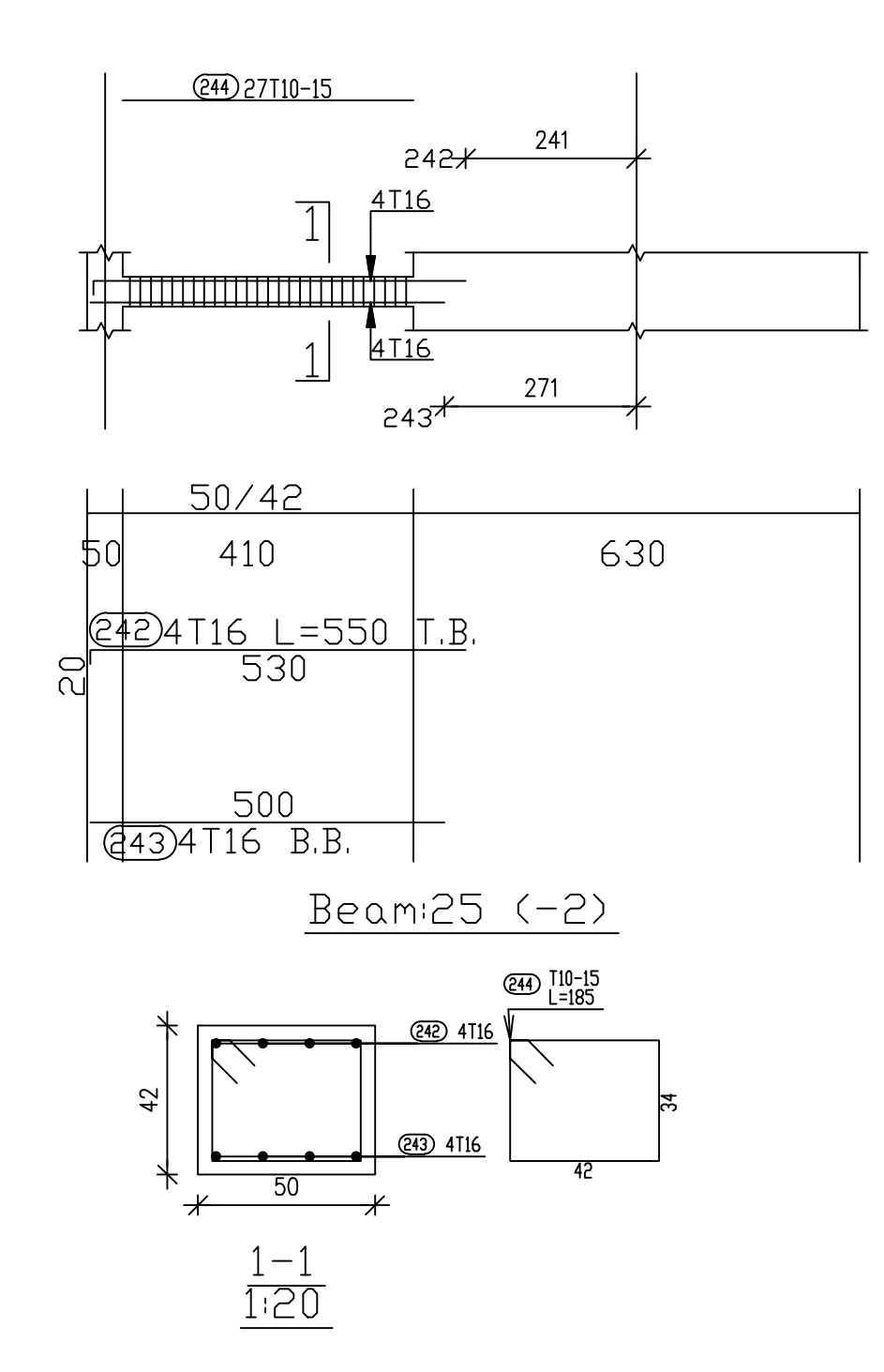
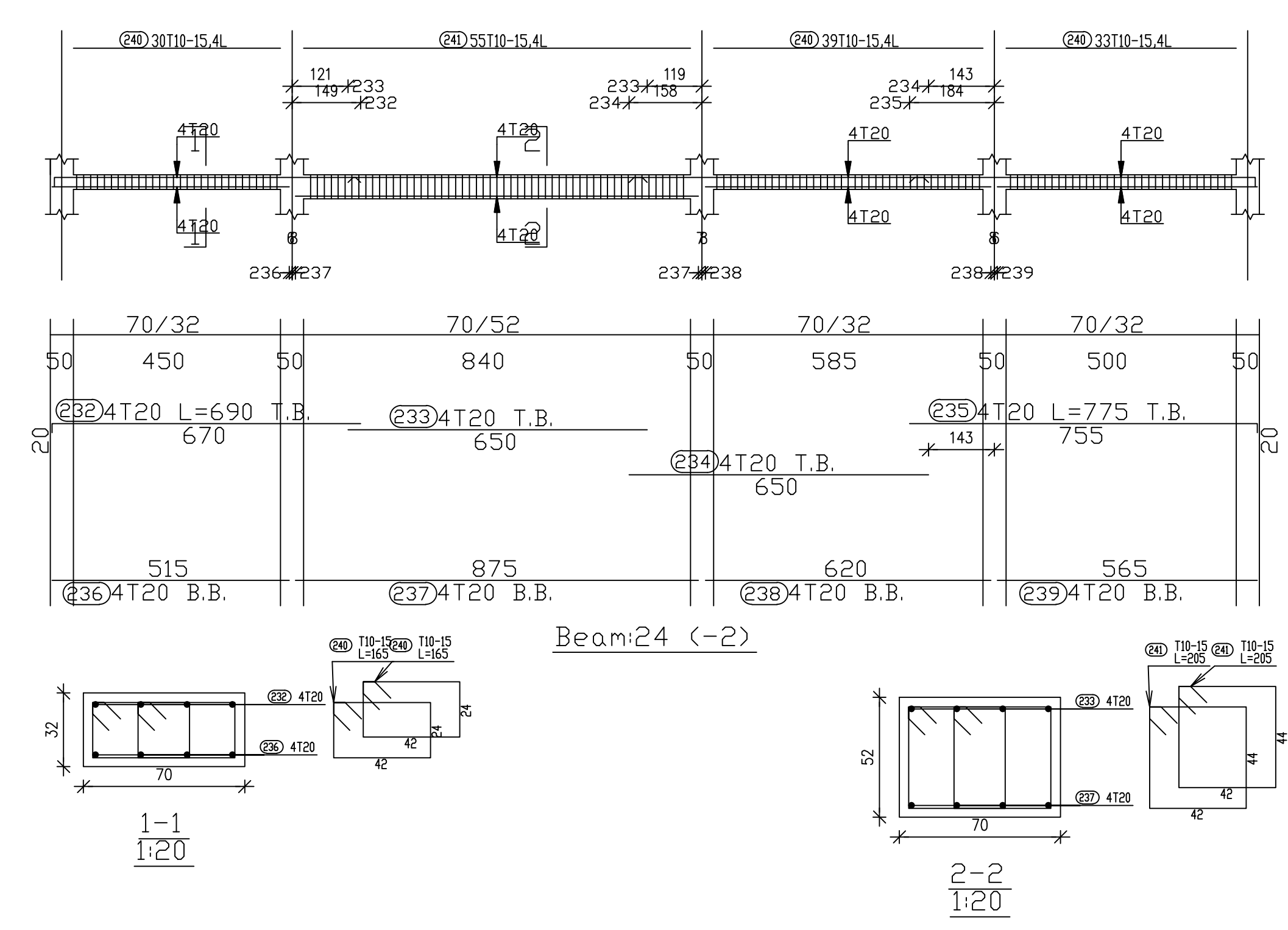
Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah
Designed by :
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	534





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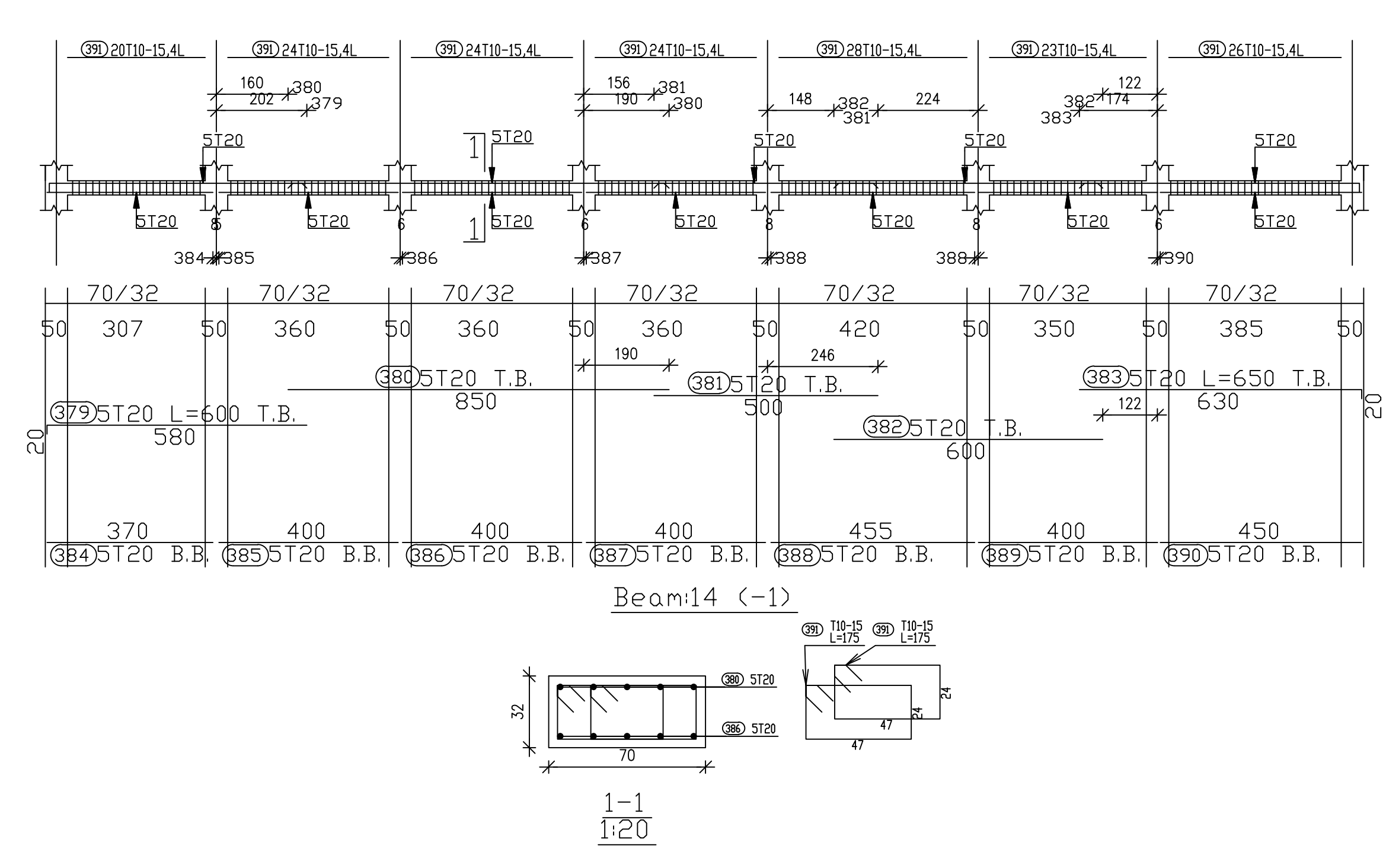
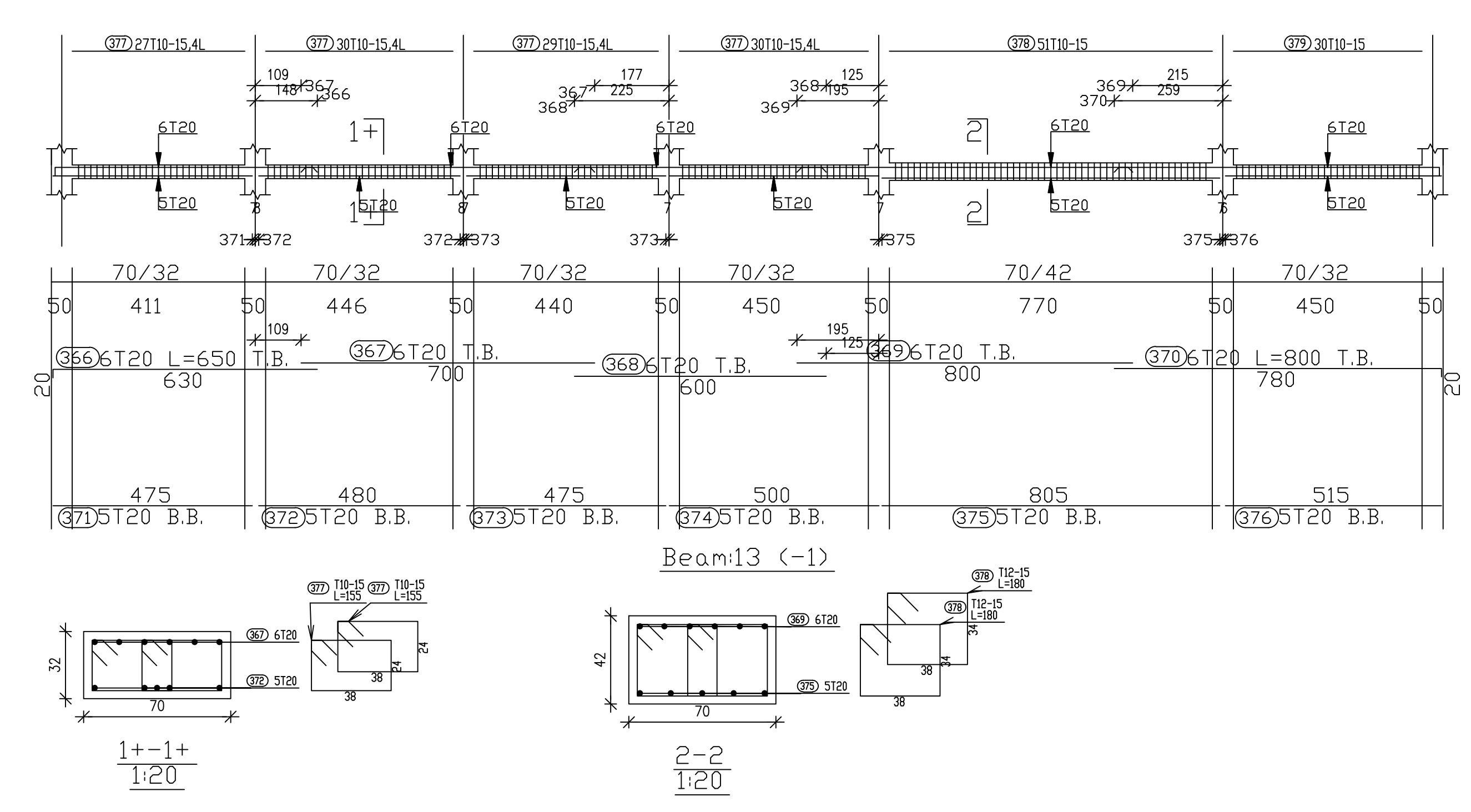
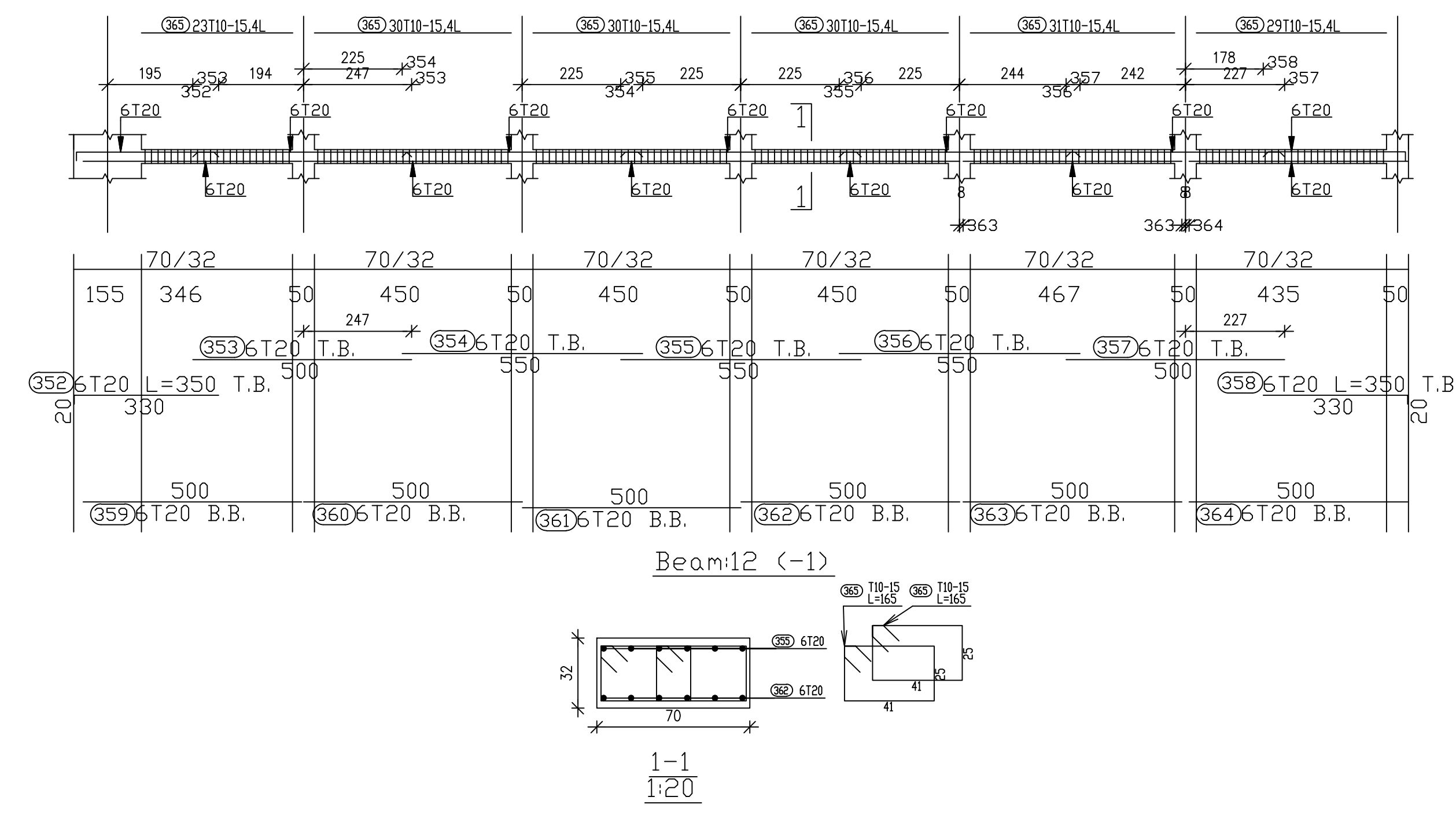
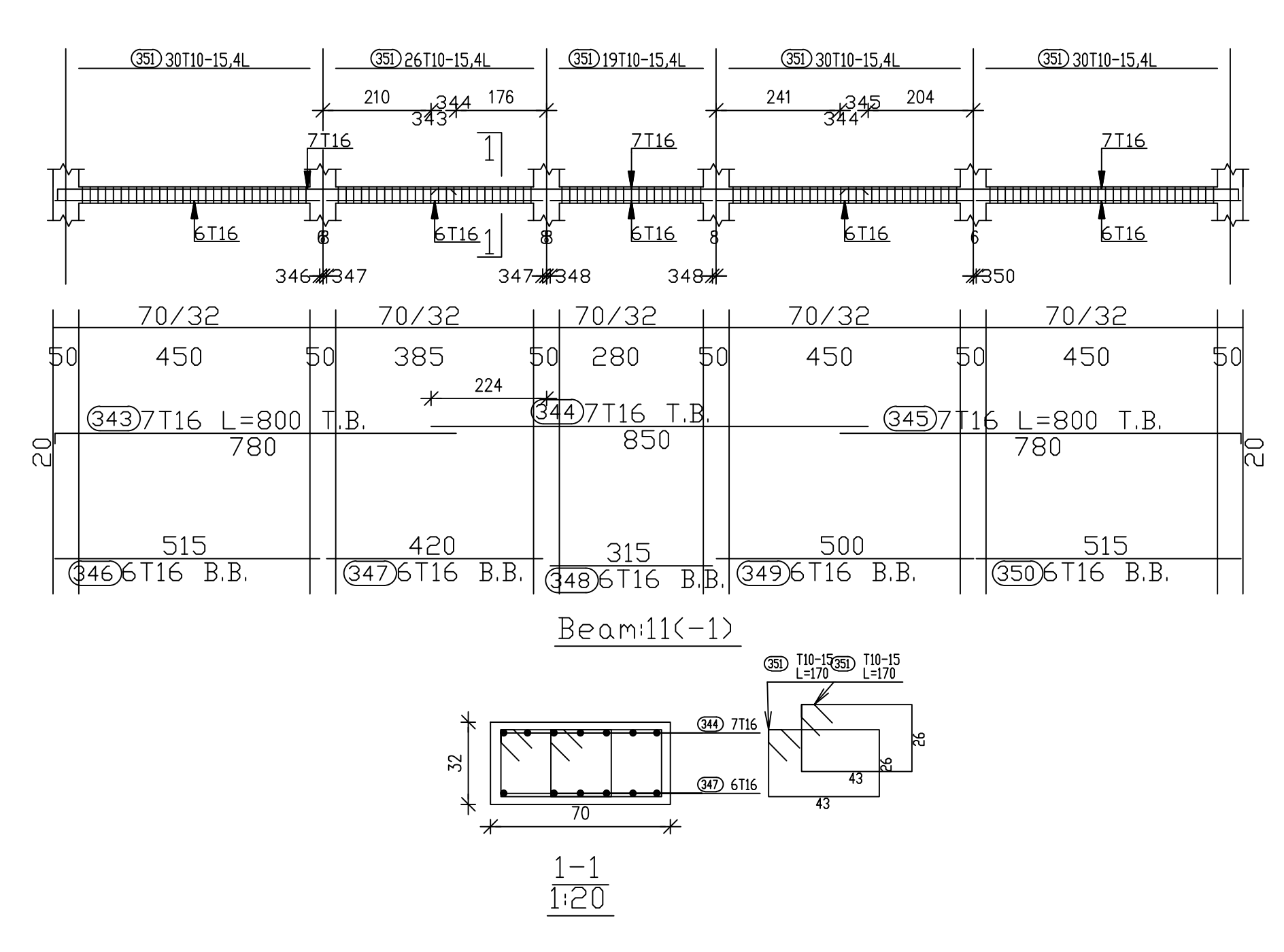
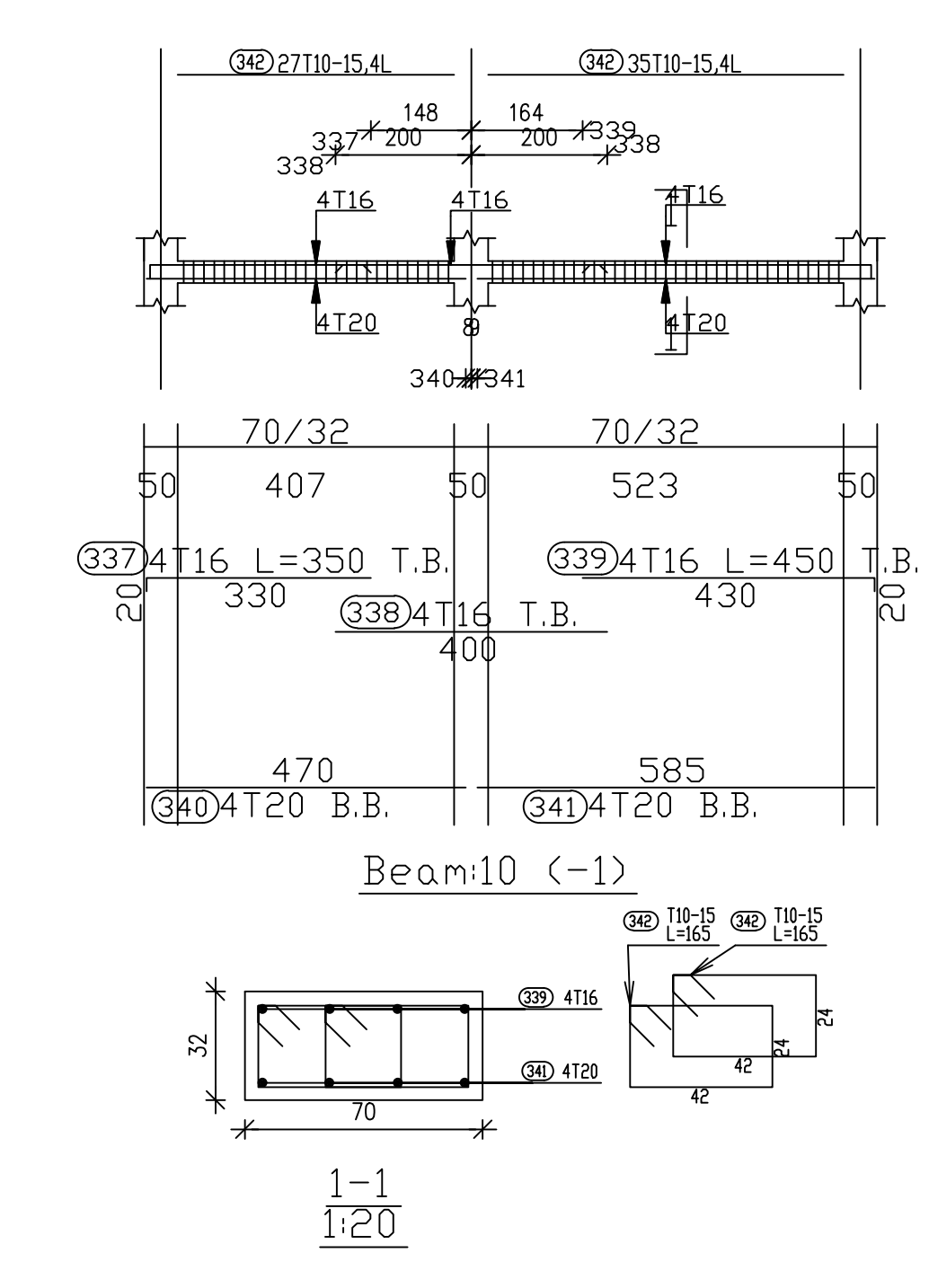
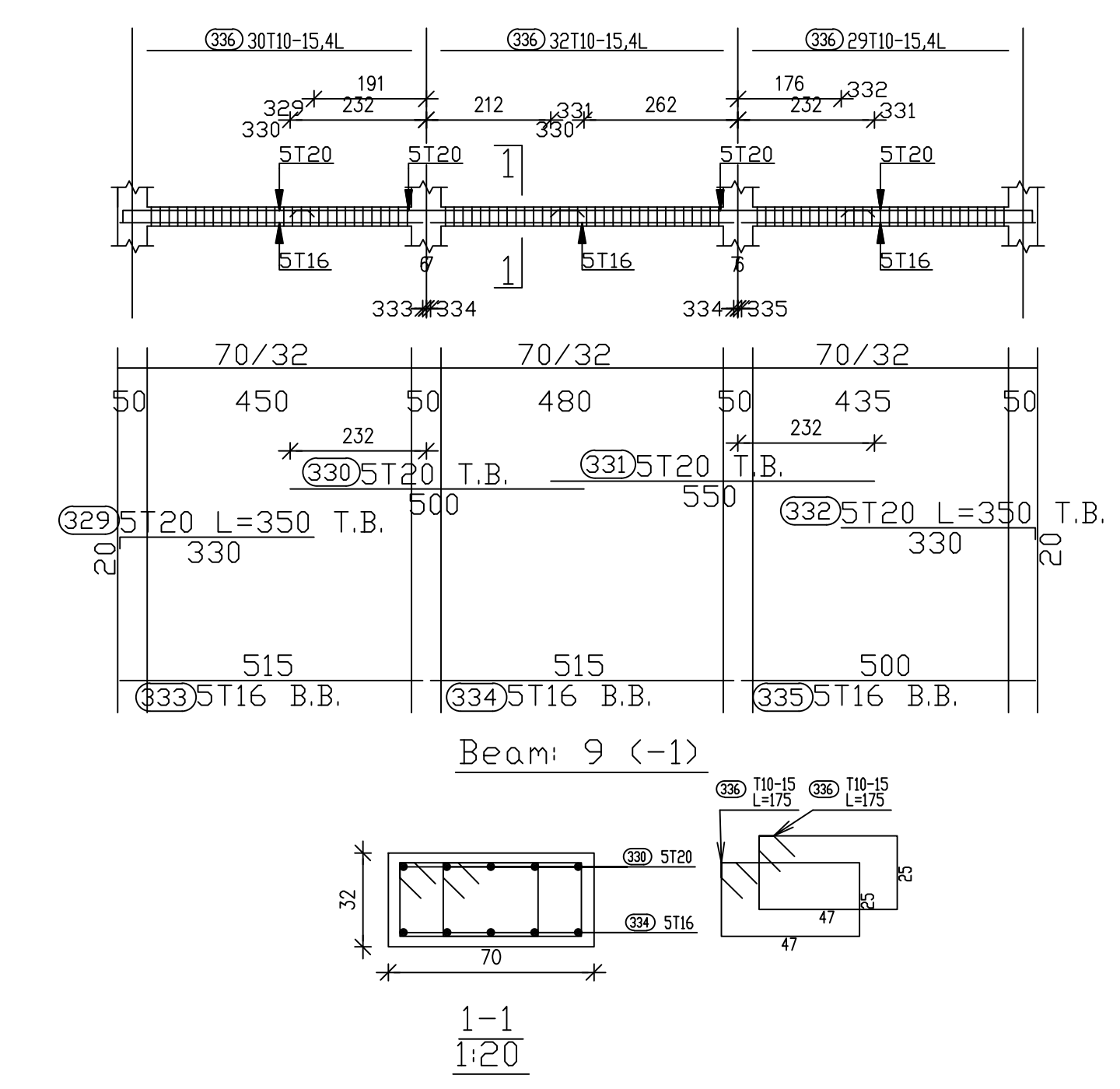
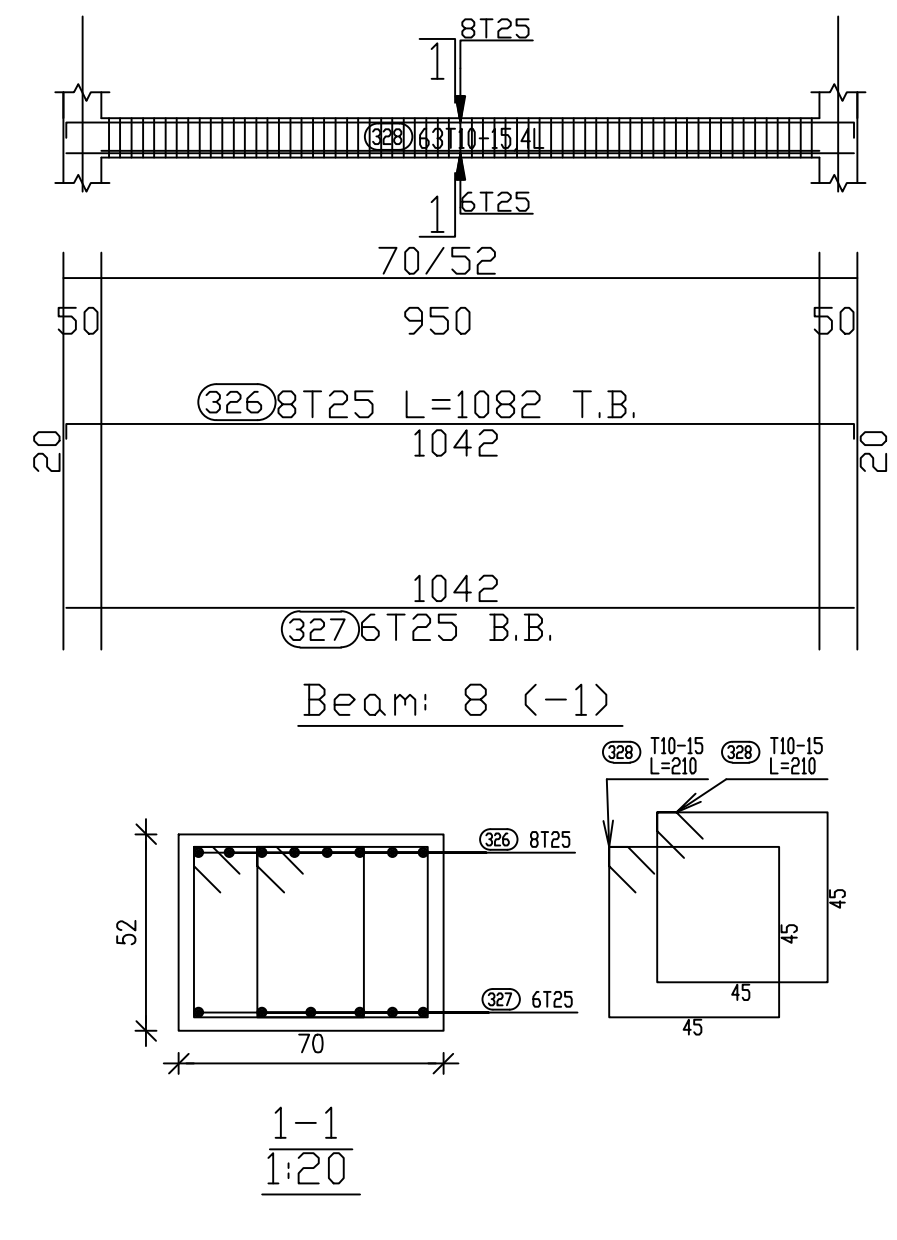
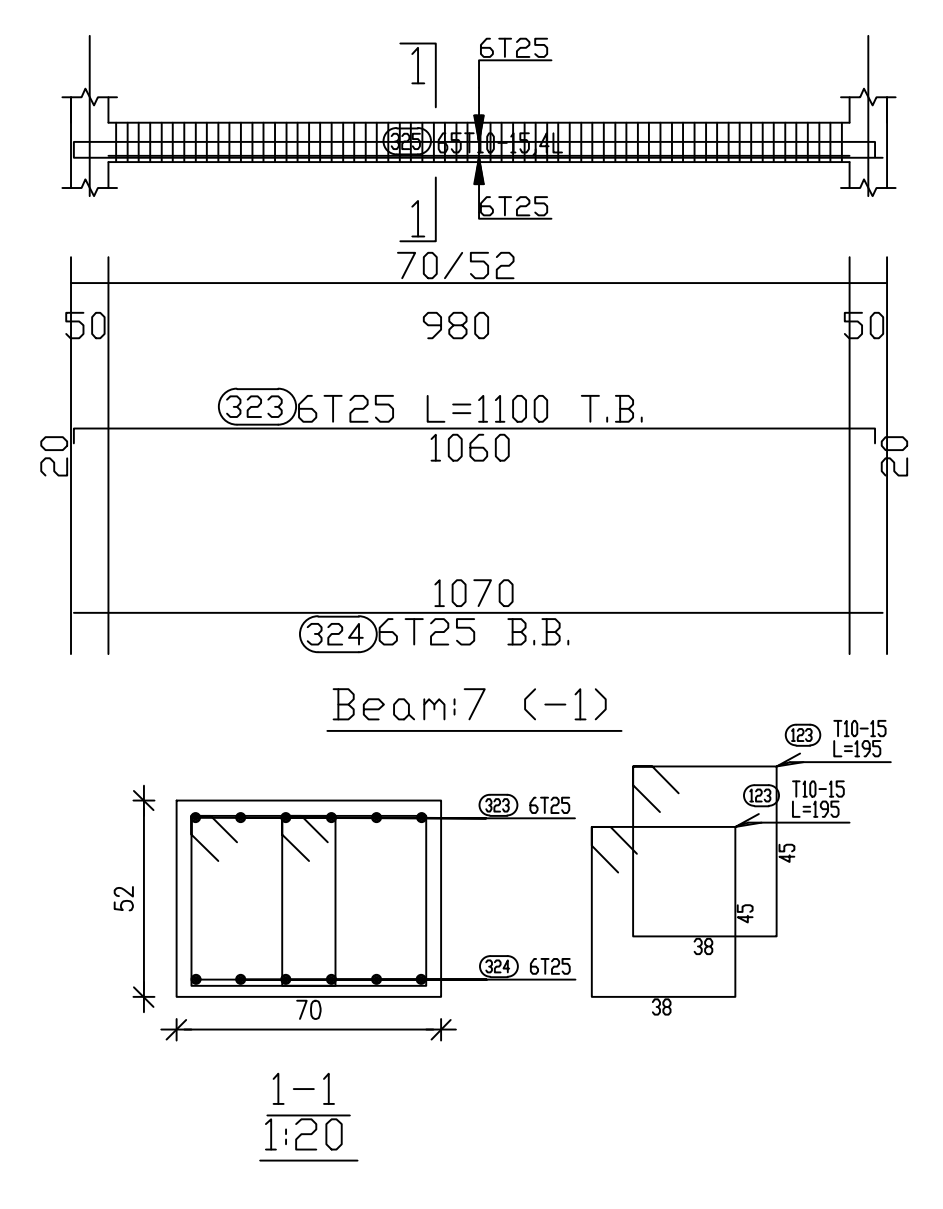
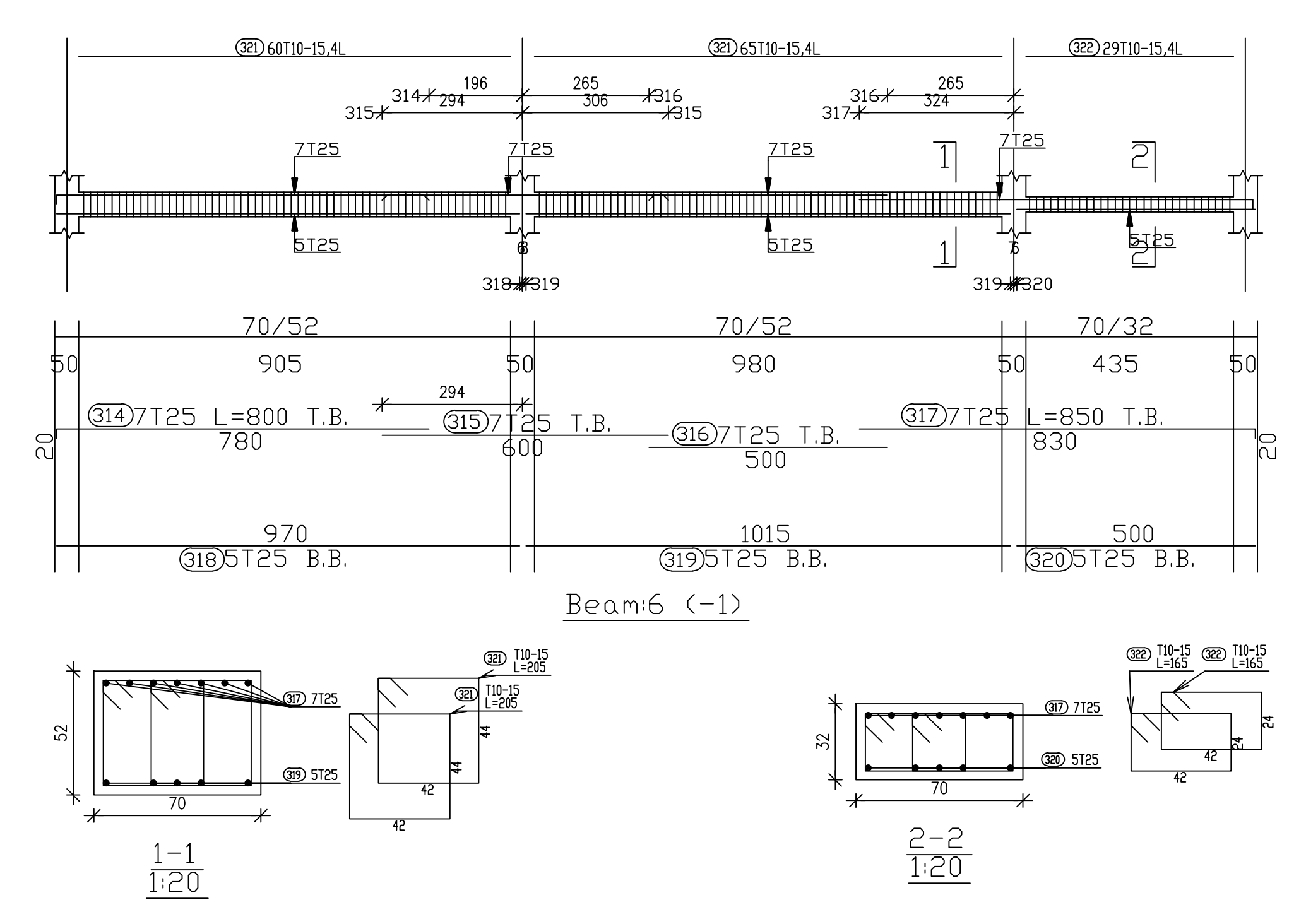
Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah
Designed by :
shatmaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	535





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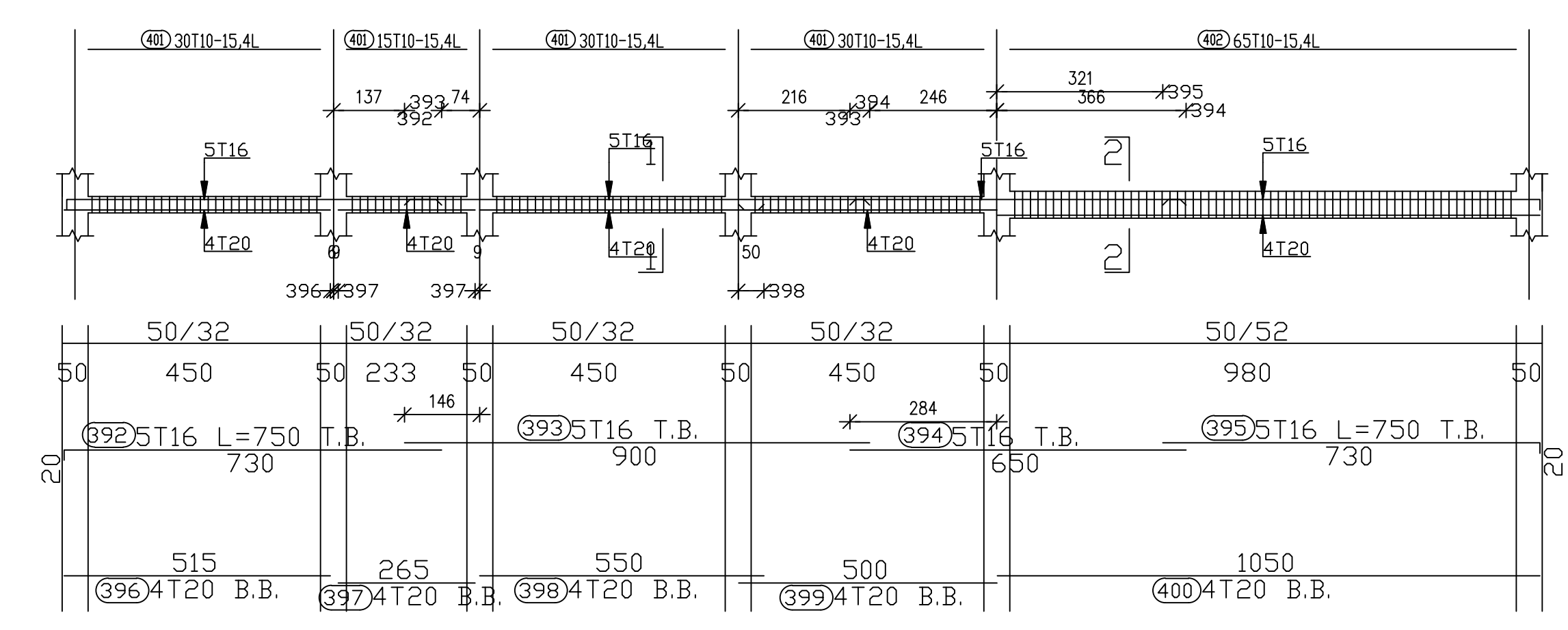
Graduation Project

Mall

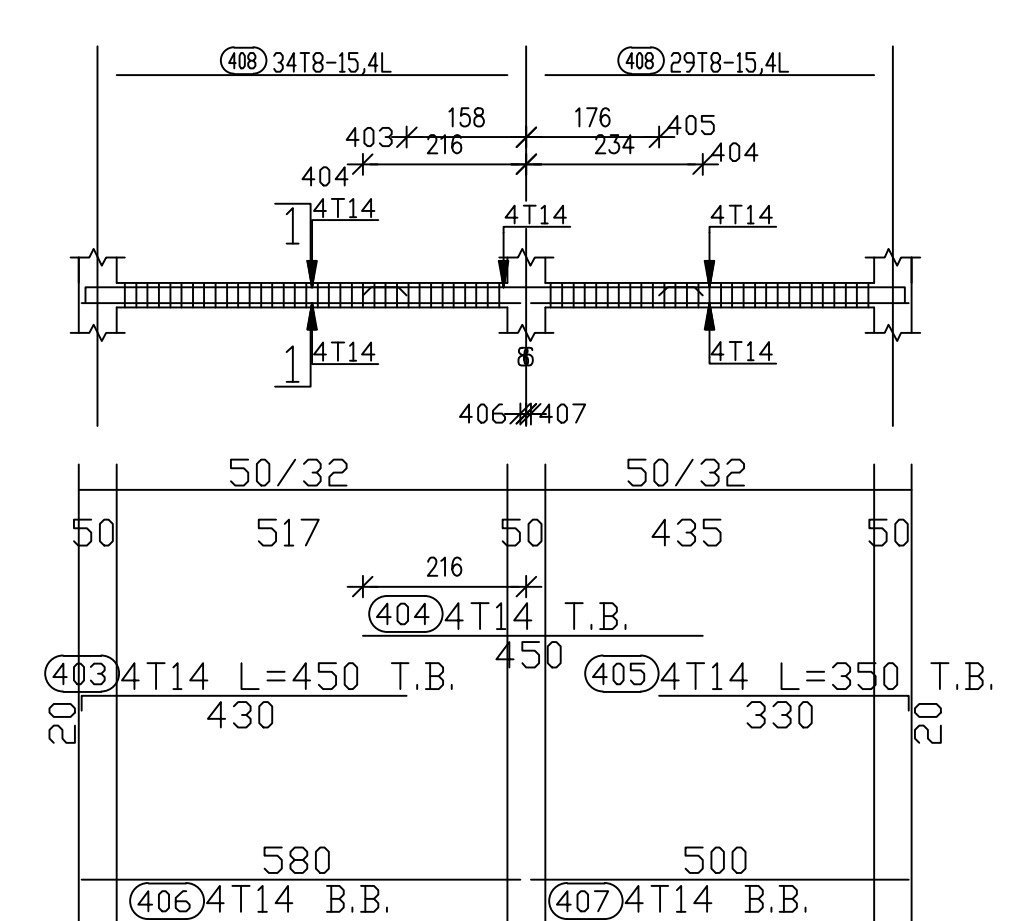
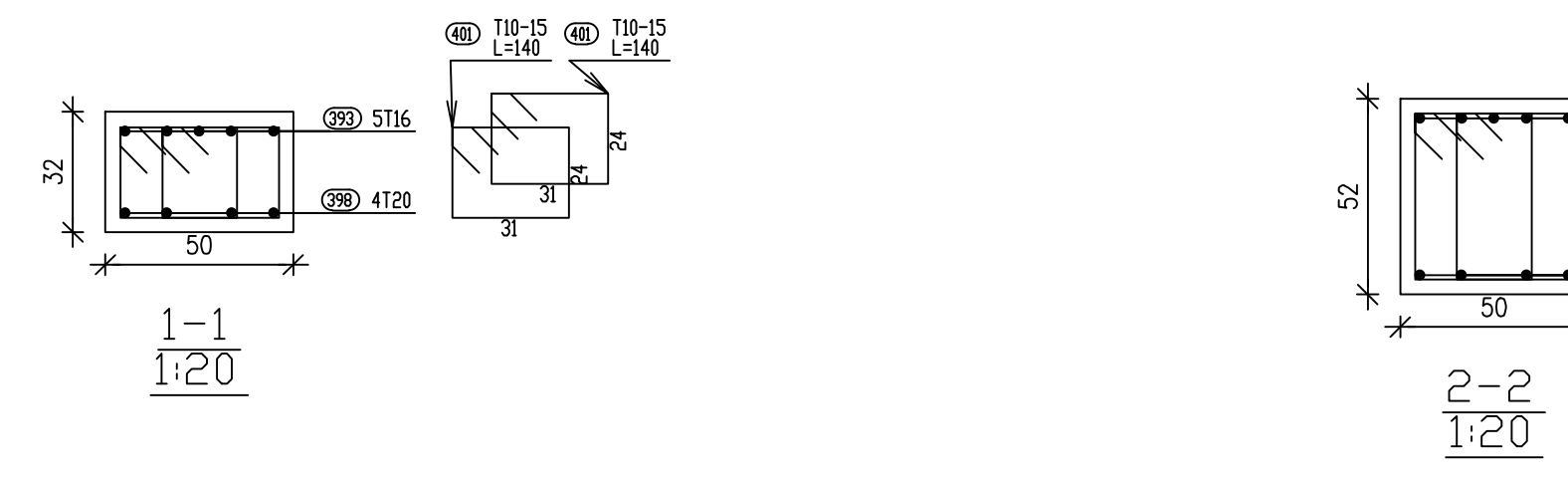
DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah
Designed by :
shatmaa salah
moatasem zedat
mohamad salameen
nadeen melhem

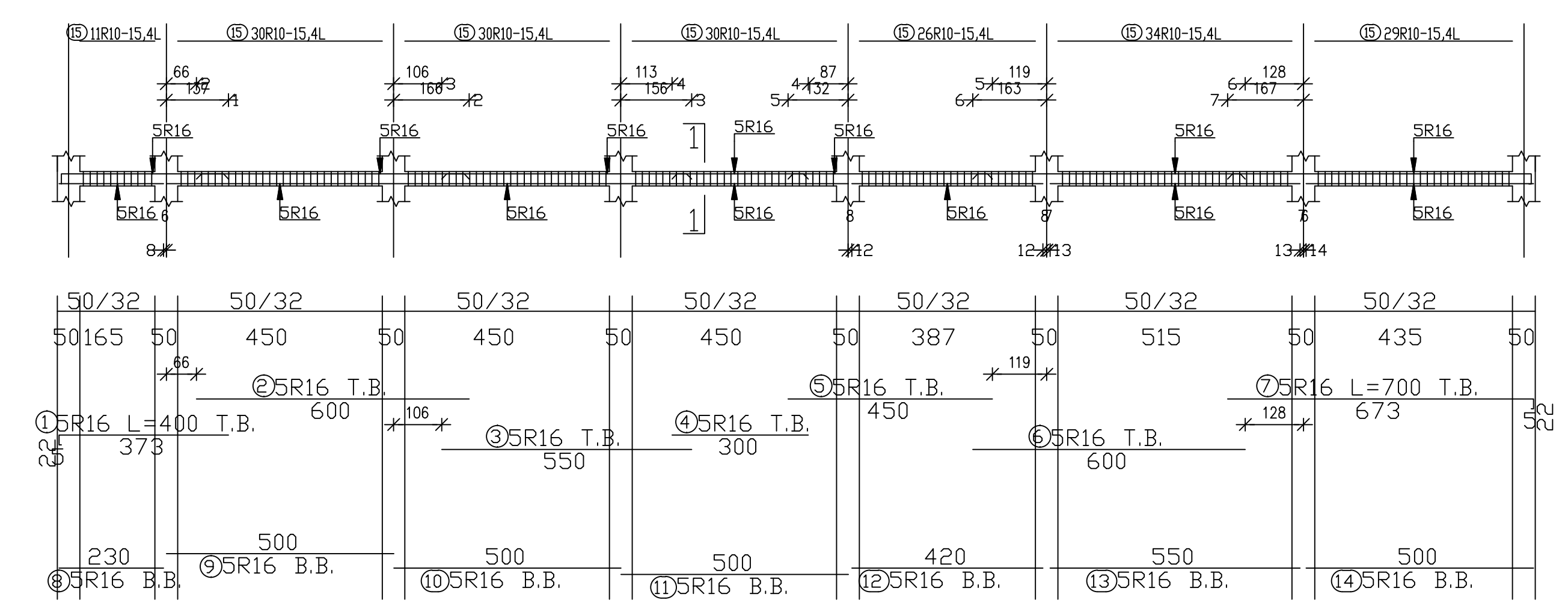
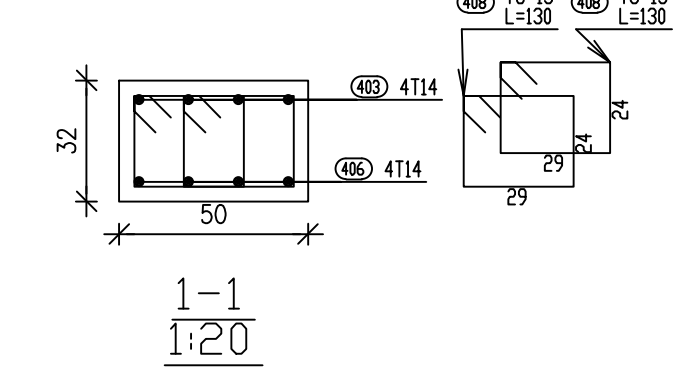
SCALE	No. of DRAW
1/200	536



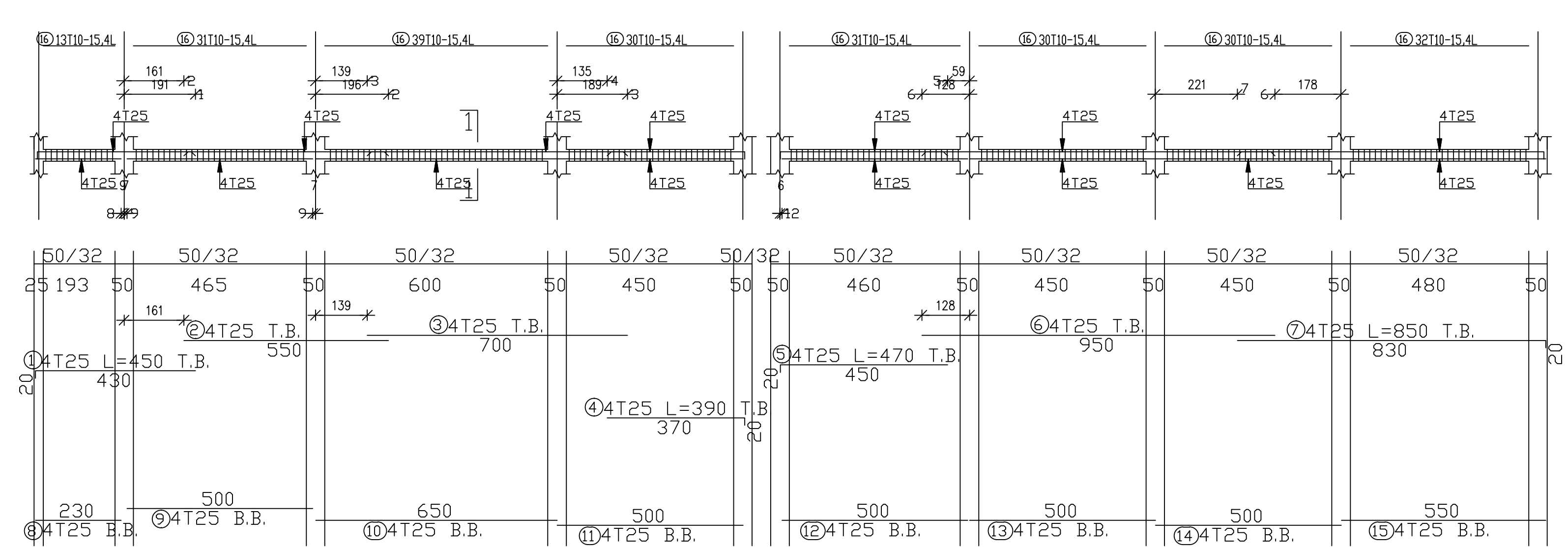
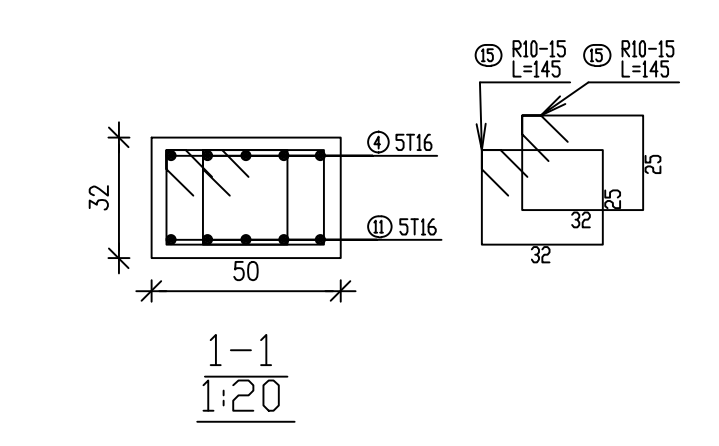
Beam:15(-1)



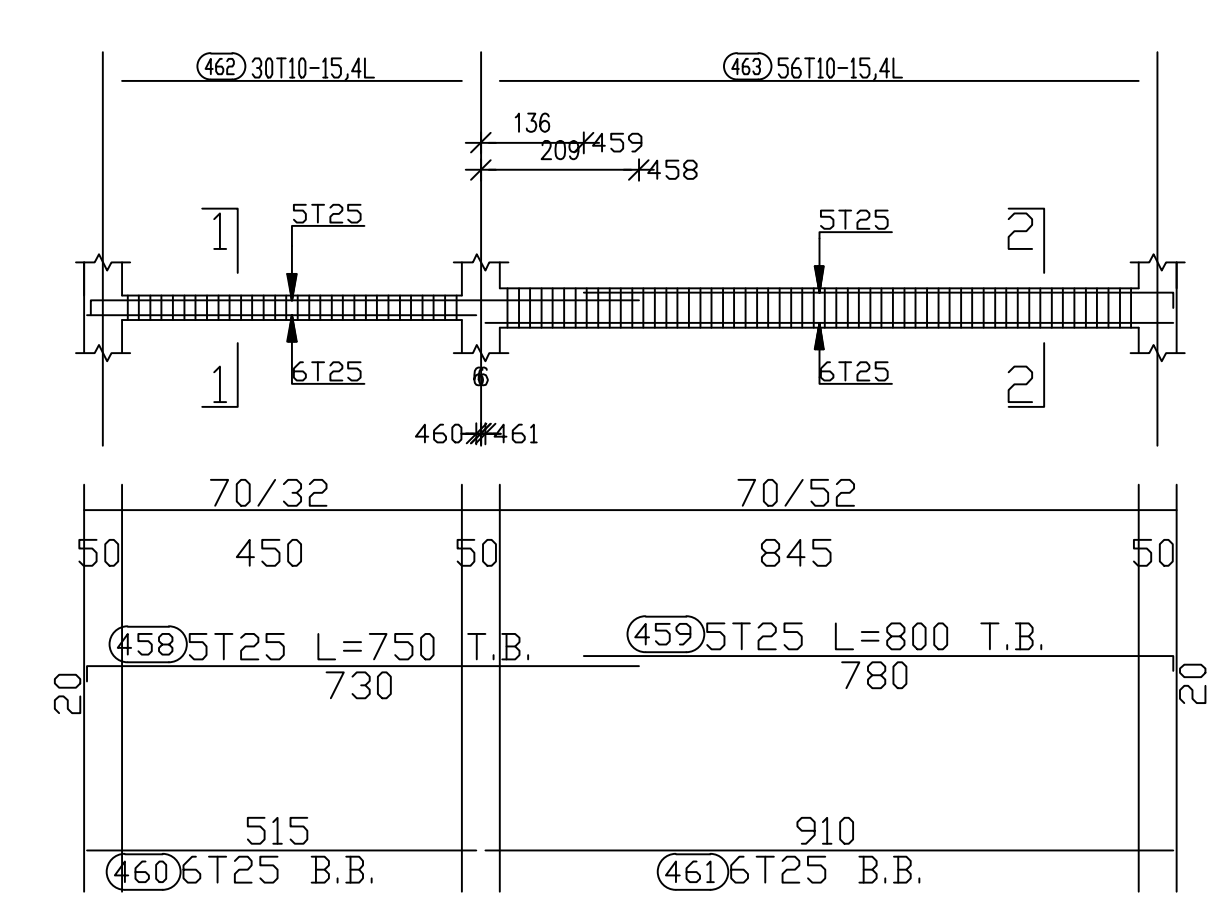
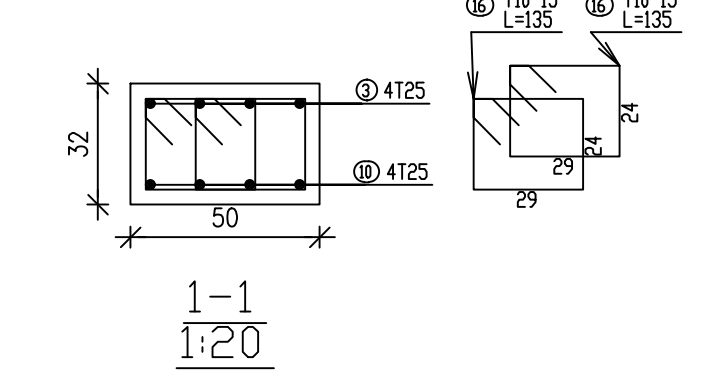
Beam:16 (-1)



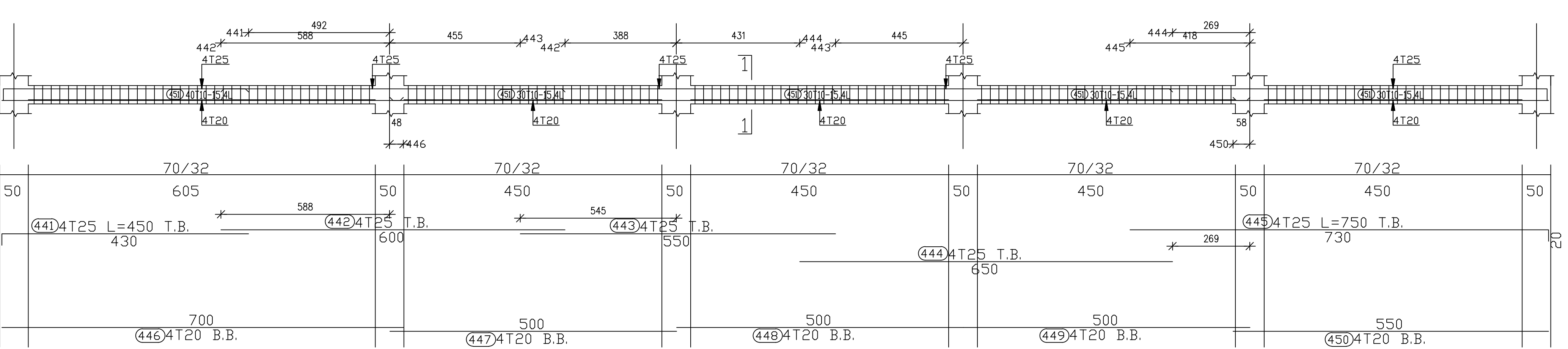
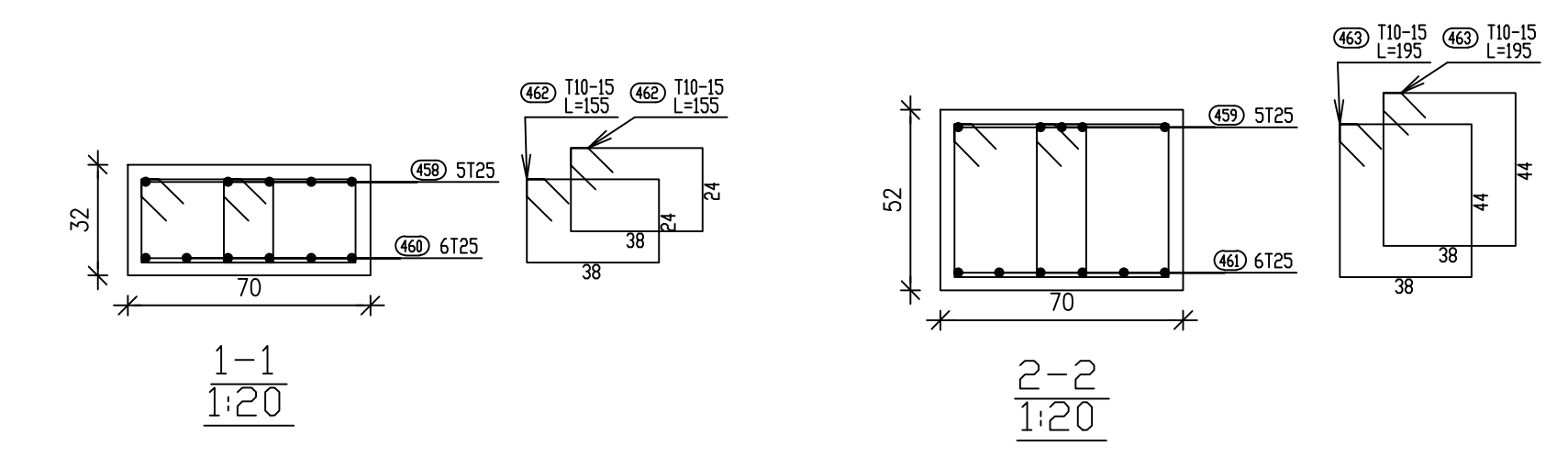
Beam: 17 (-1)



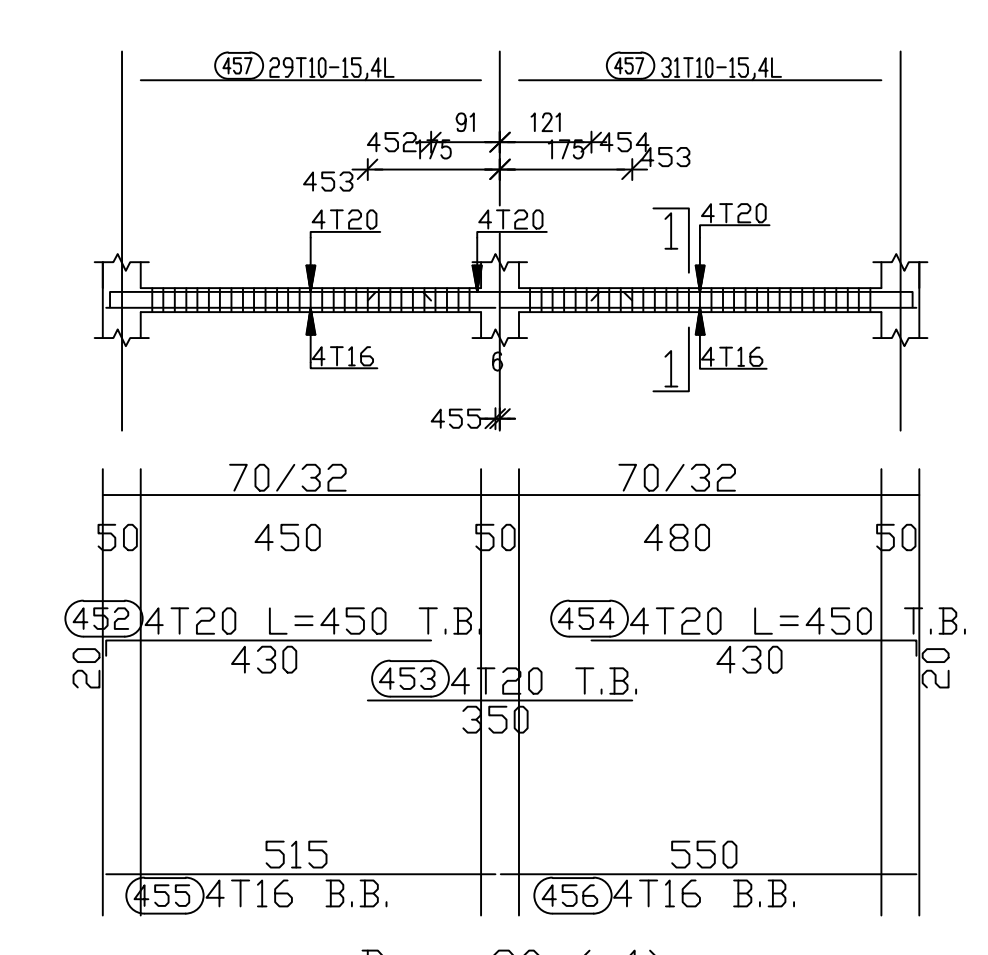
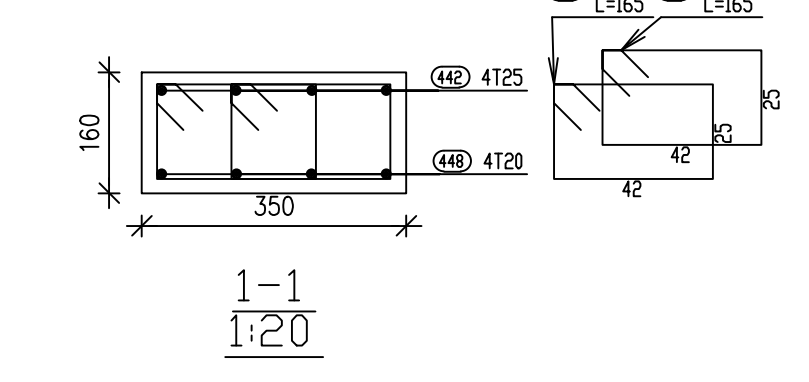
Beam:18(-1)



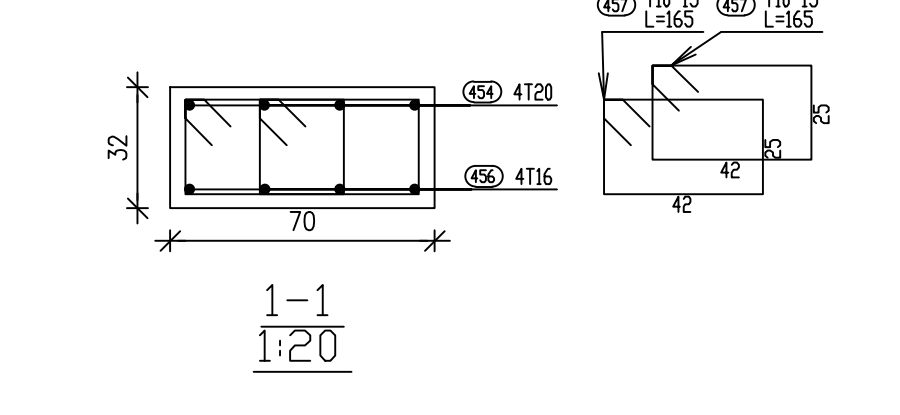
Beam:21 (-1)

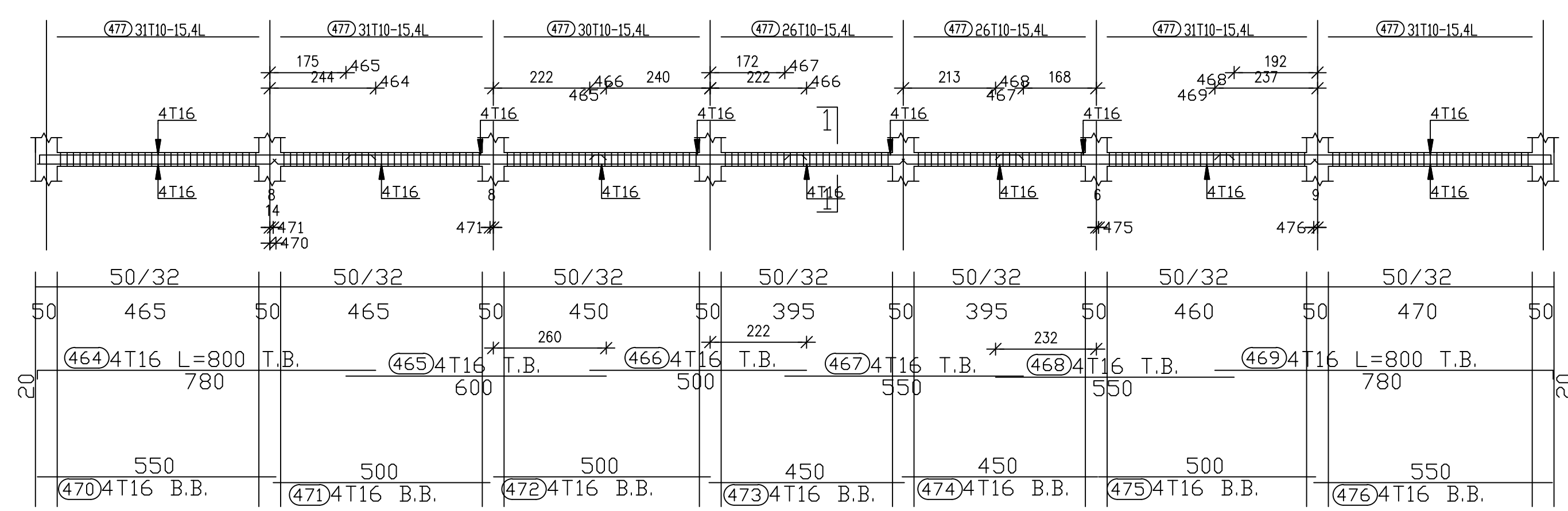


Beam:19 (-1)

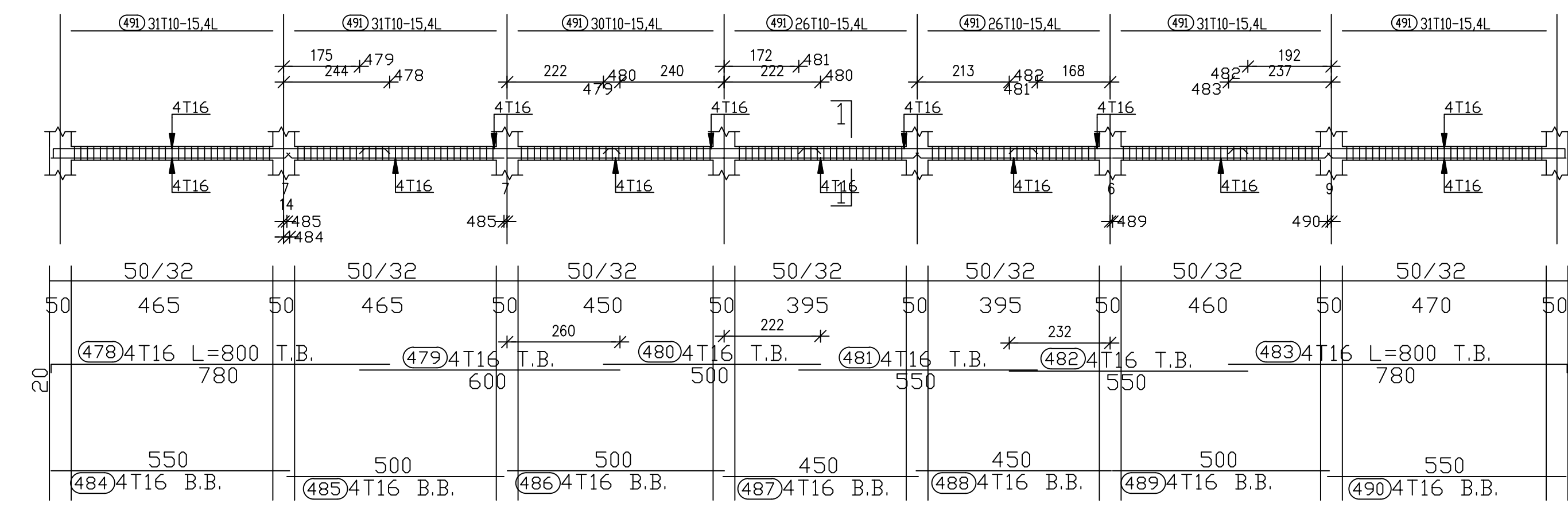
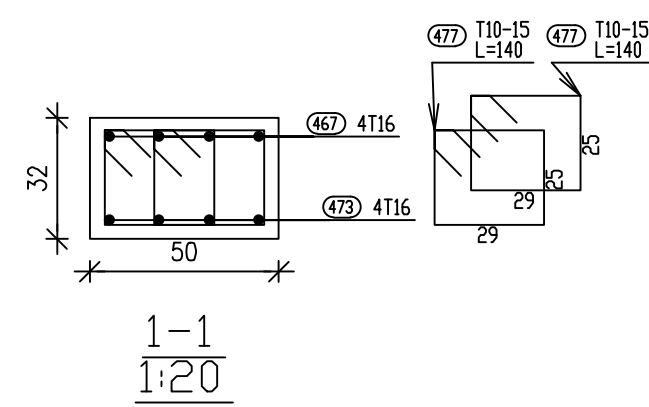


Beam:20 (-1)

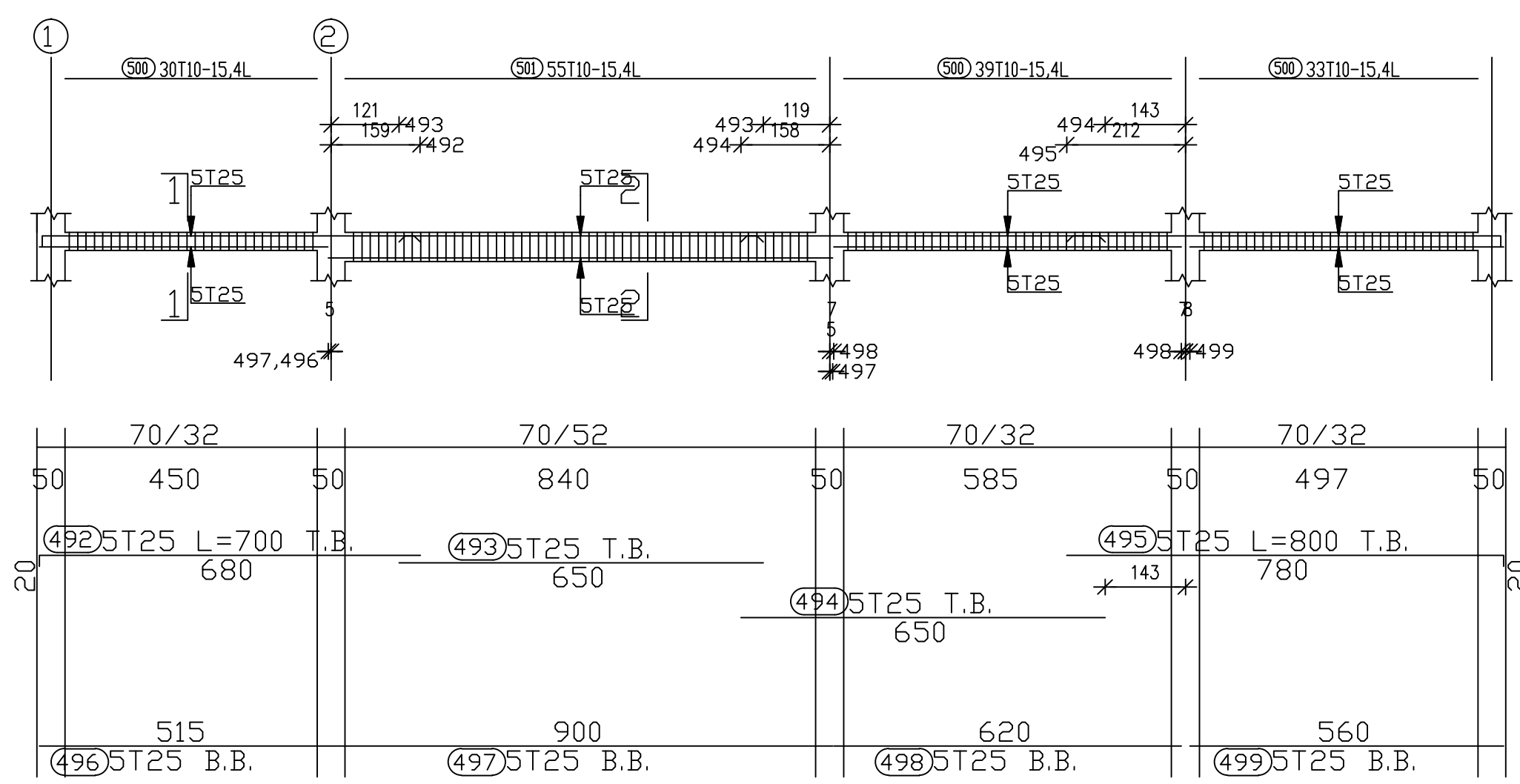
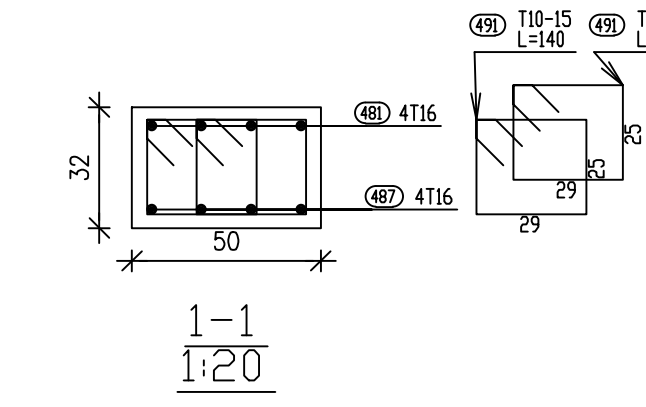




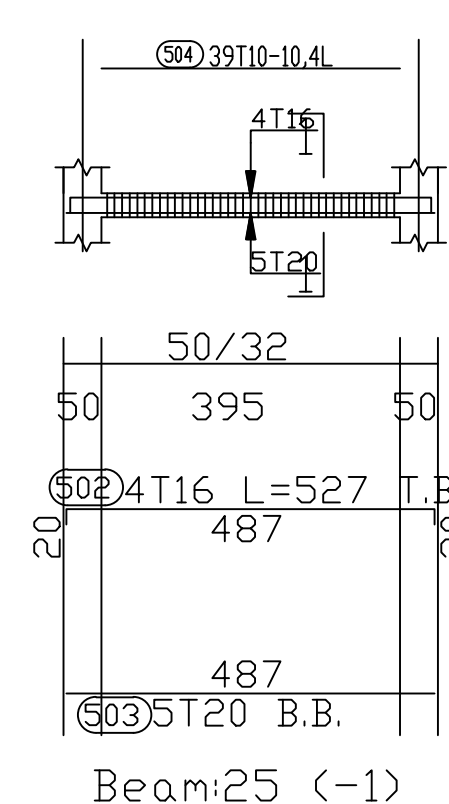
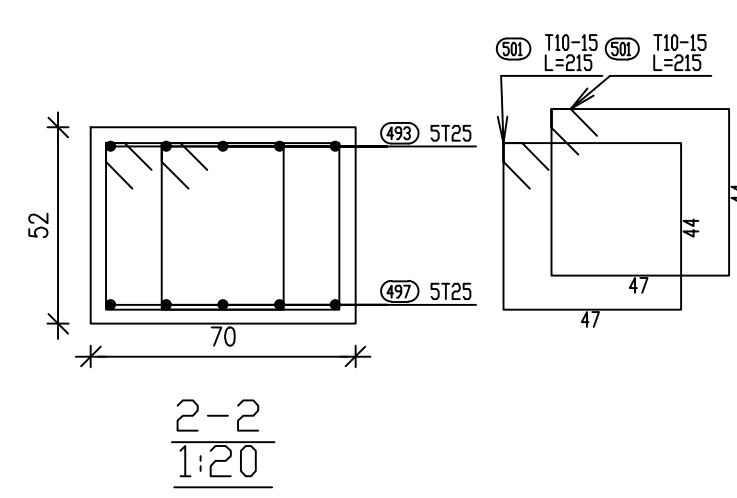
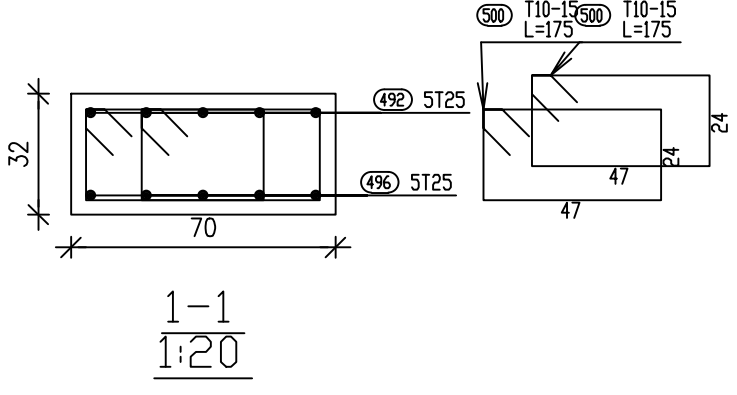
Beam22 (-1)



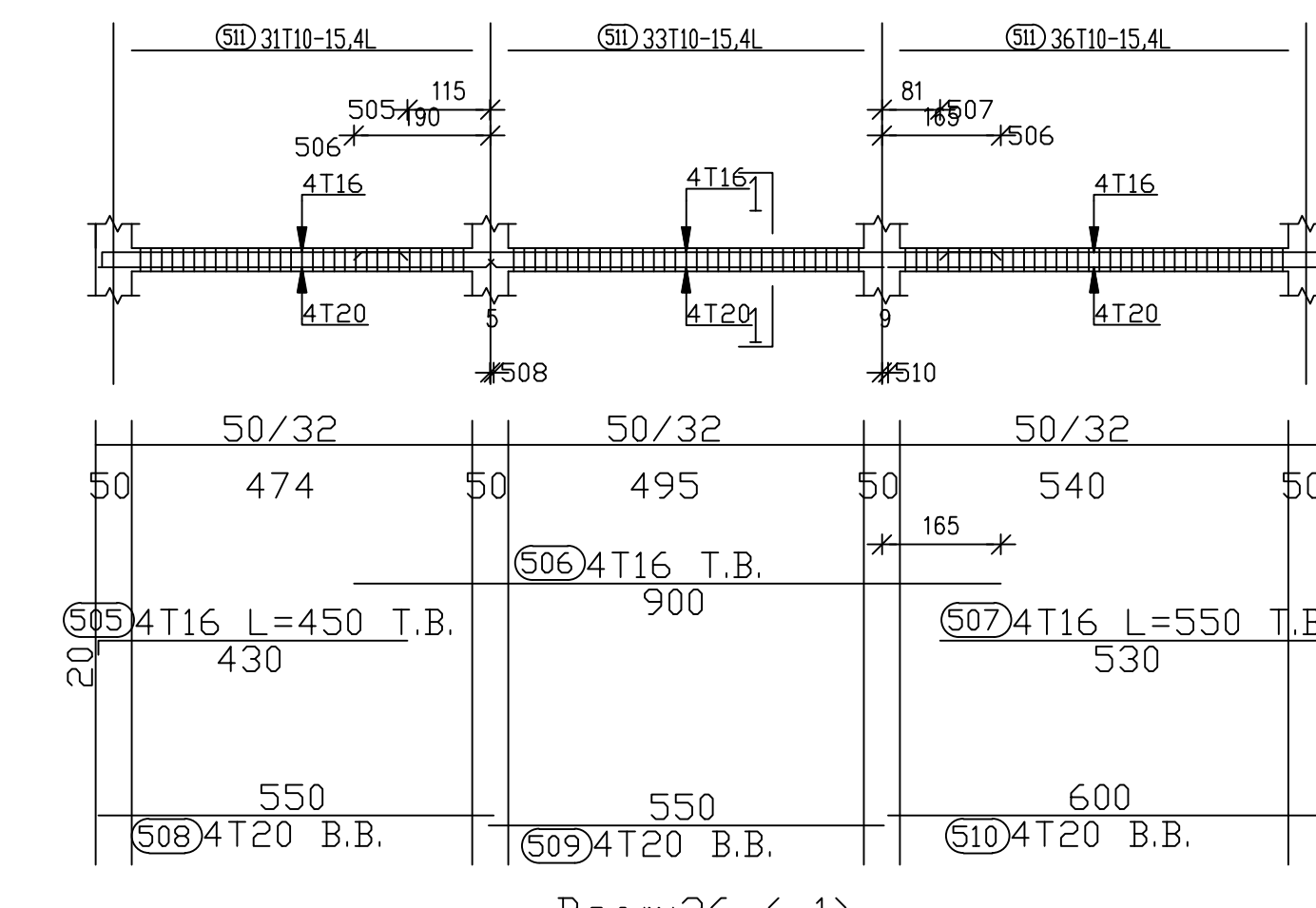
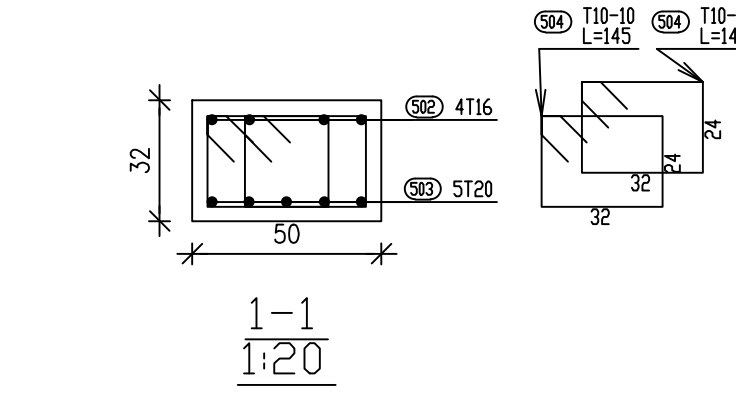
Beam23 (-1)



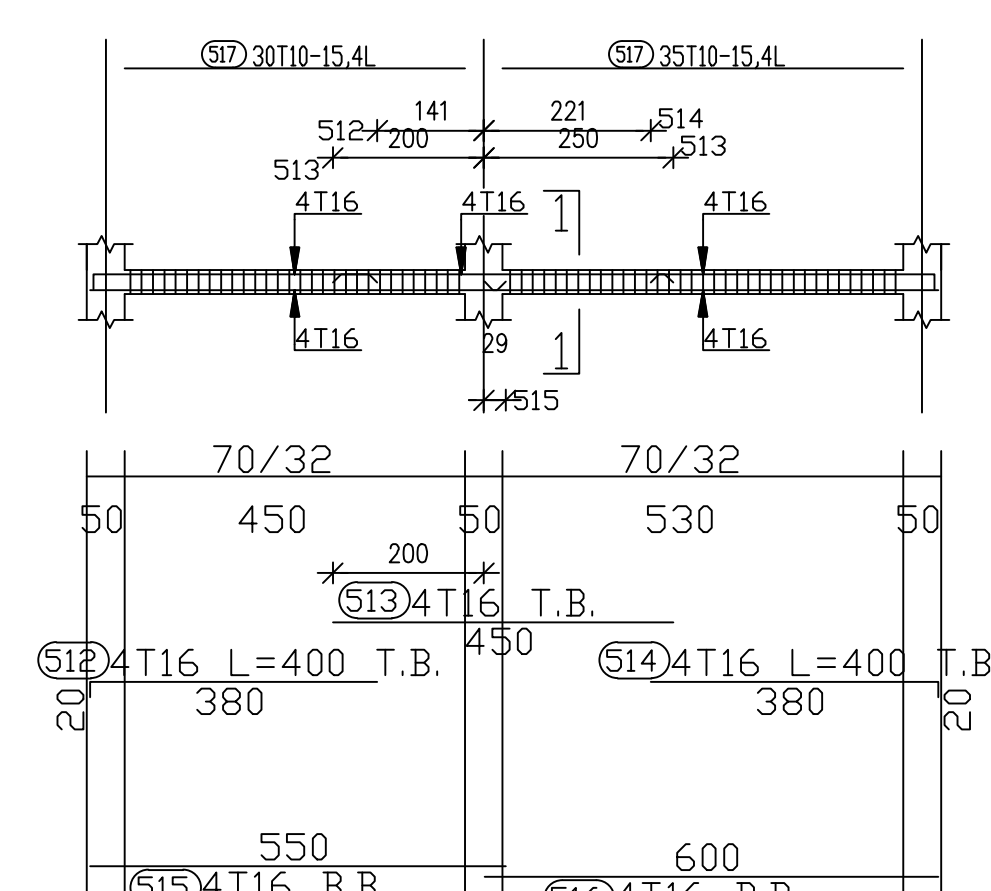
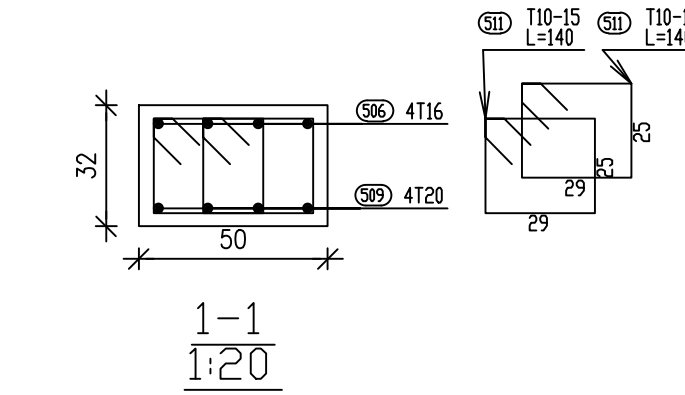
Beam24 (-1)



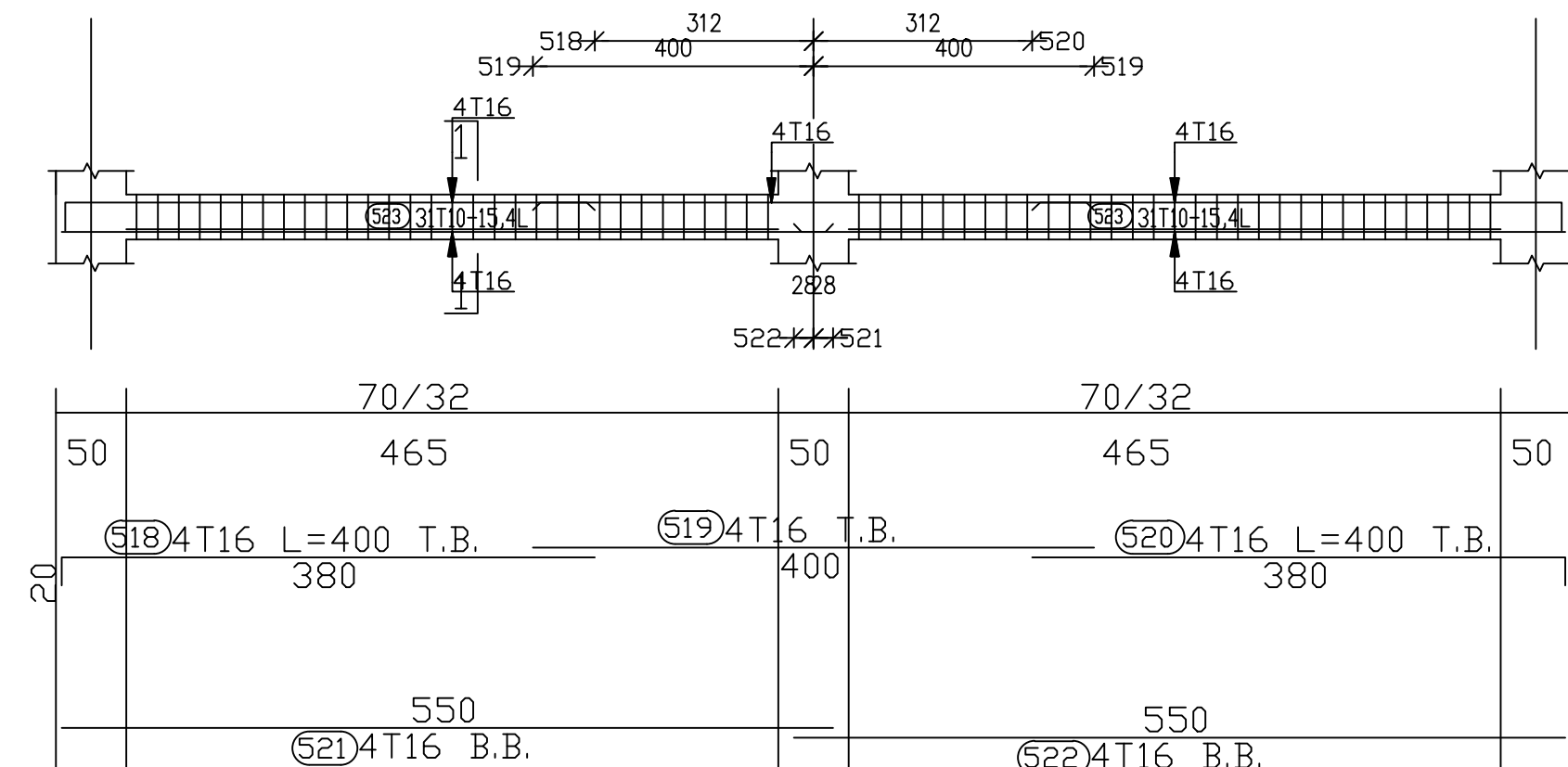
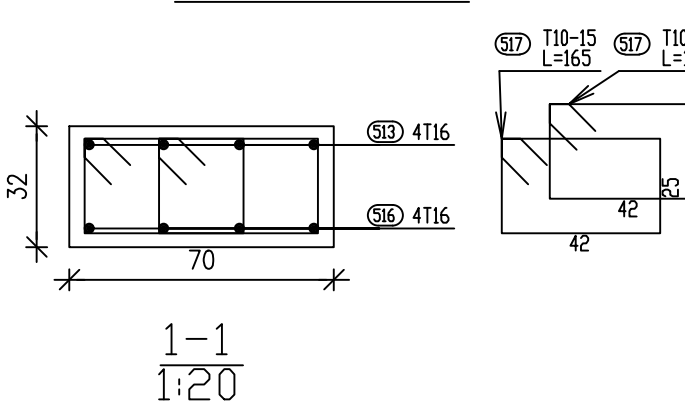
Beam25 (-1)



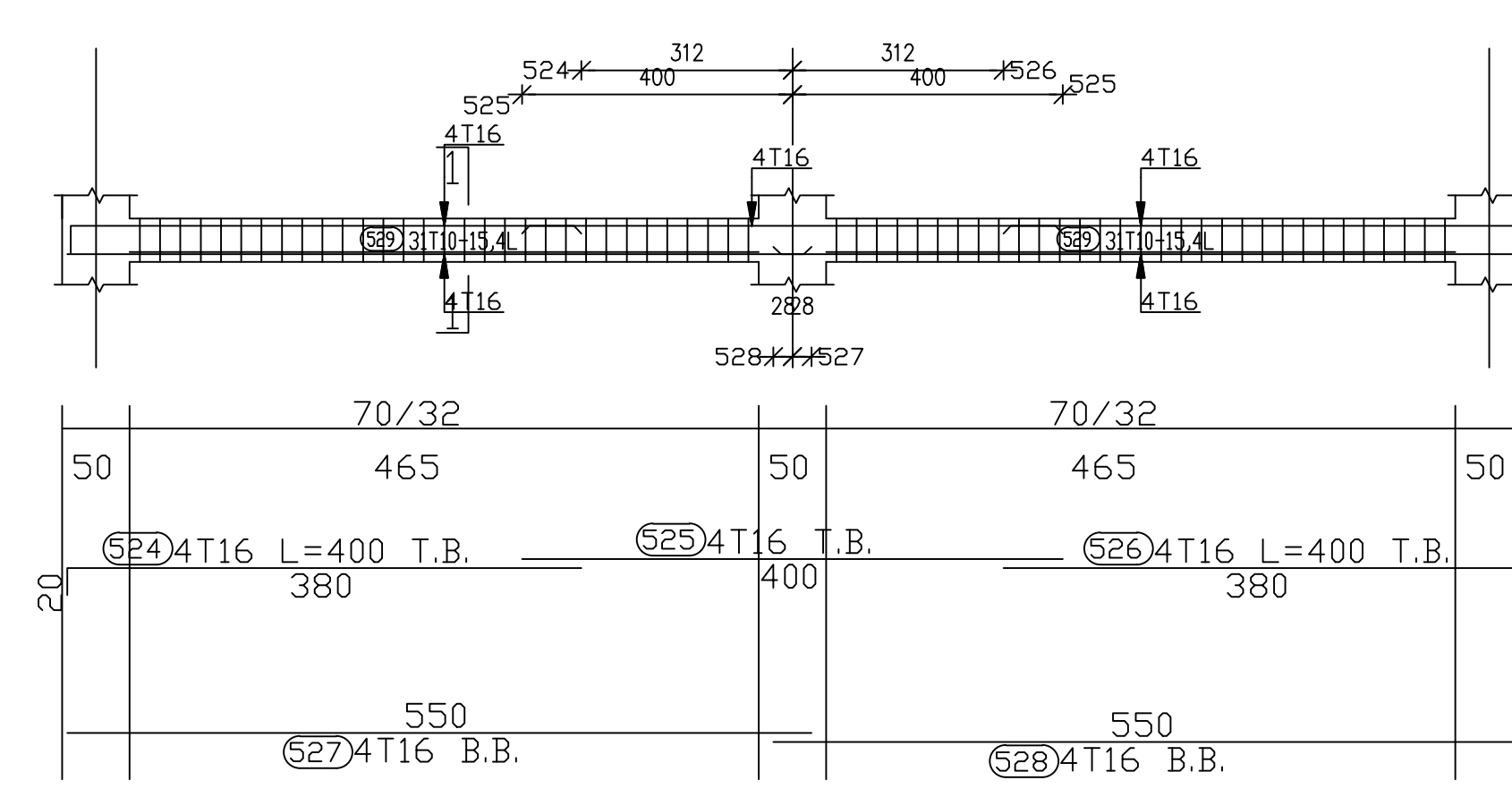
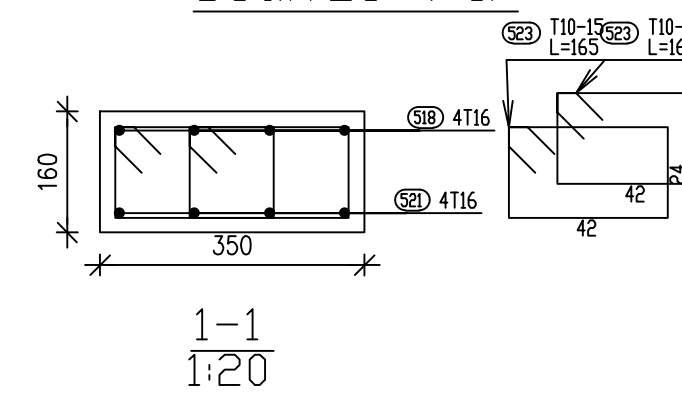
Beam26 (-1)



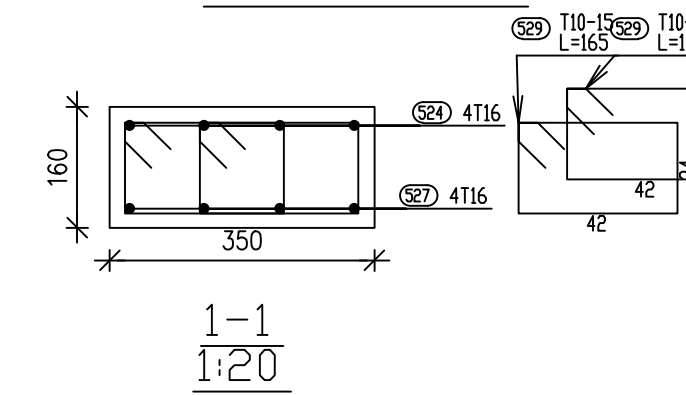
Beam27(-1)



Beam28 (-1)



Beam29 (-1)



Palestine Polytechnic University

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Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah
Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	537



Palestine Polytechnic University

Engineering College
Civil & Architectural Dept.

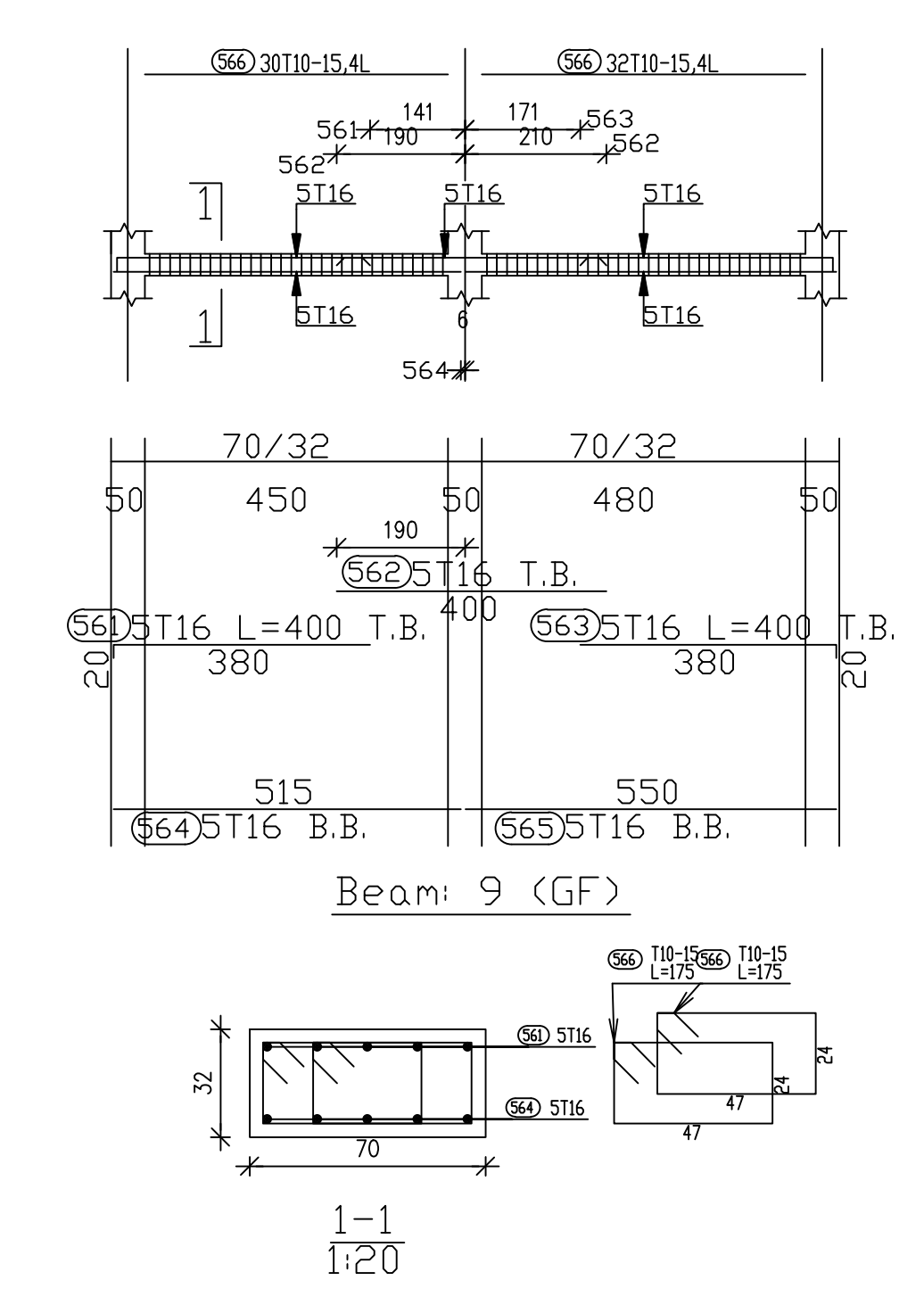
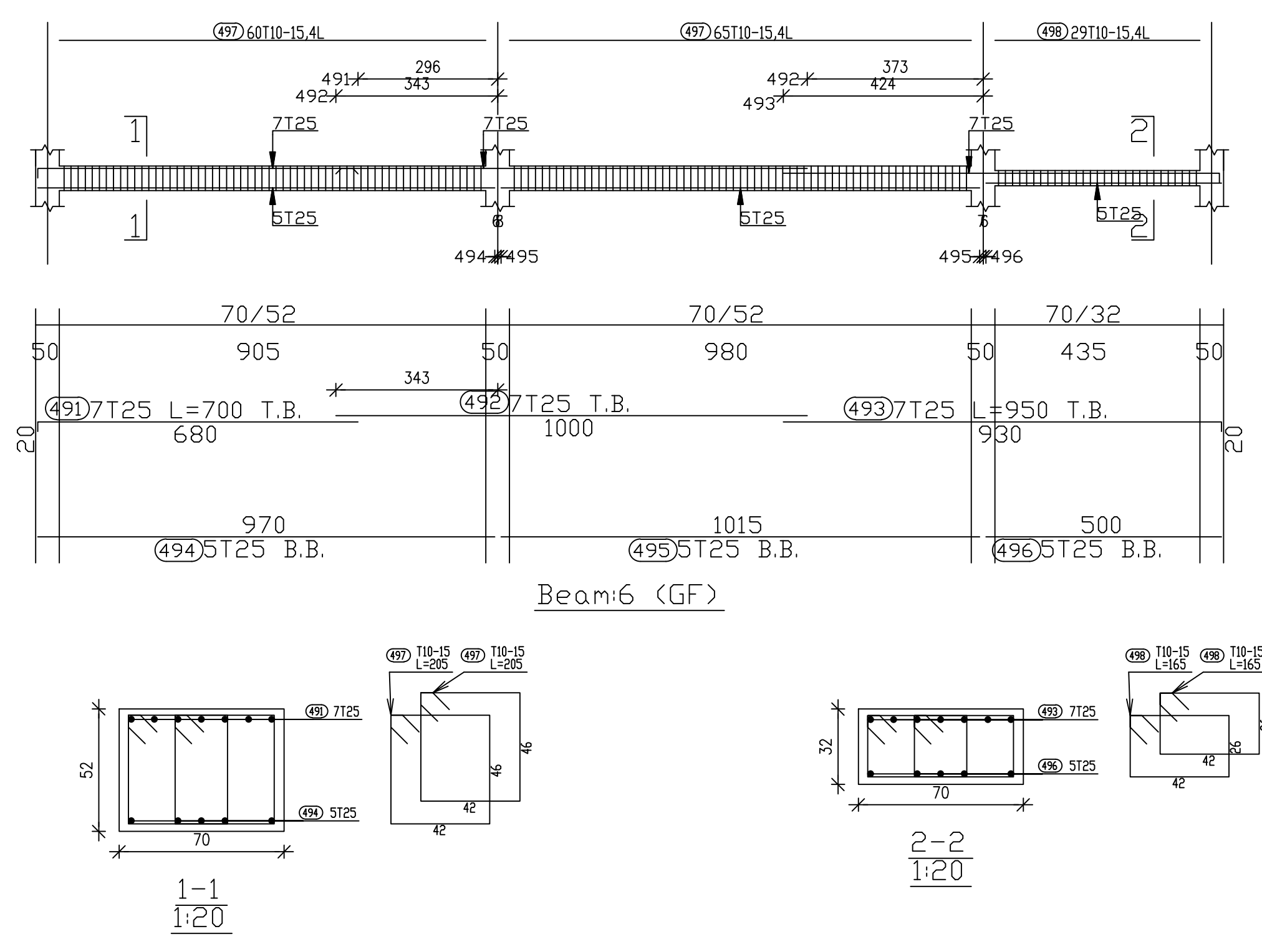
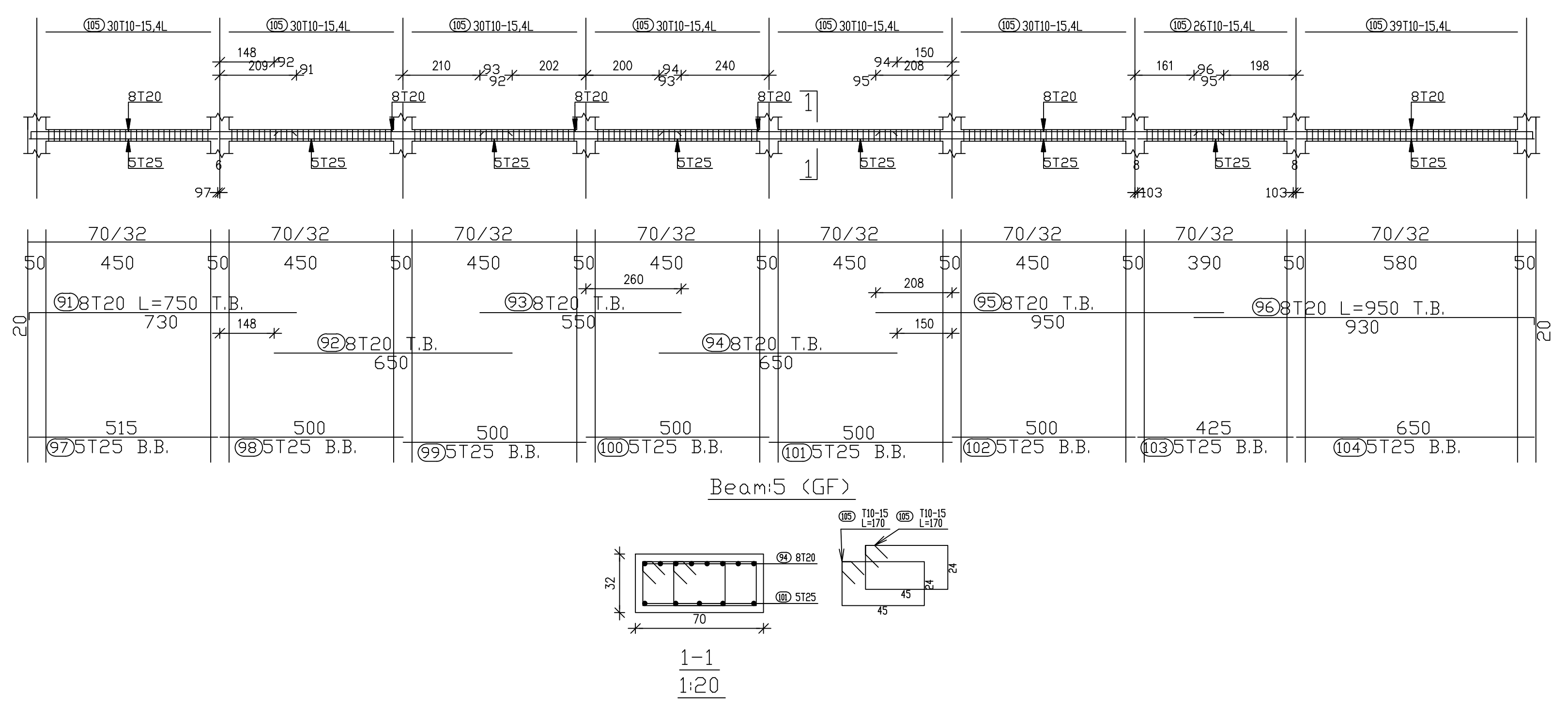
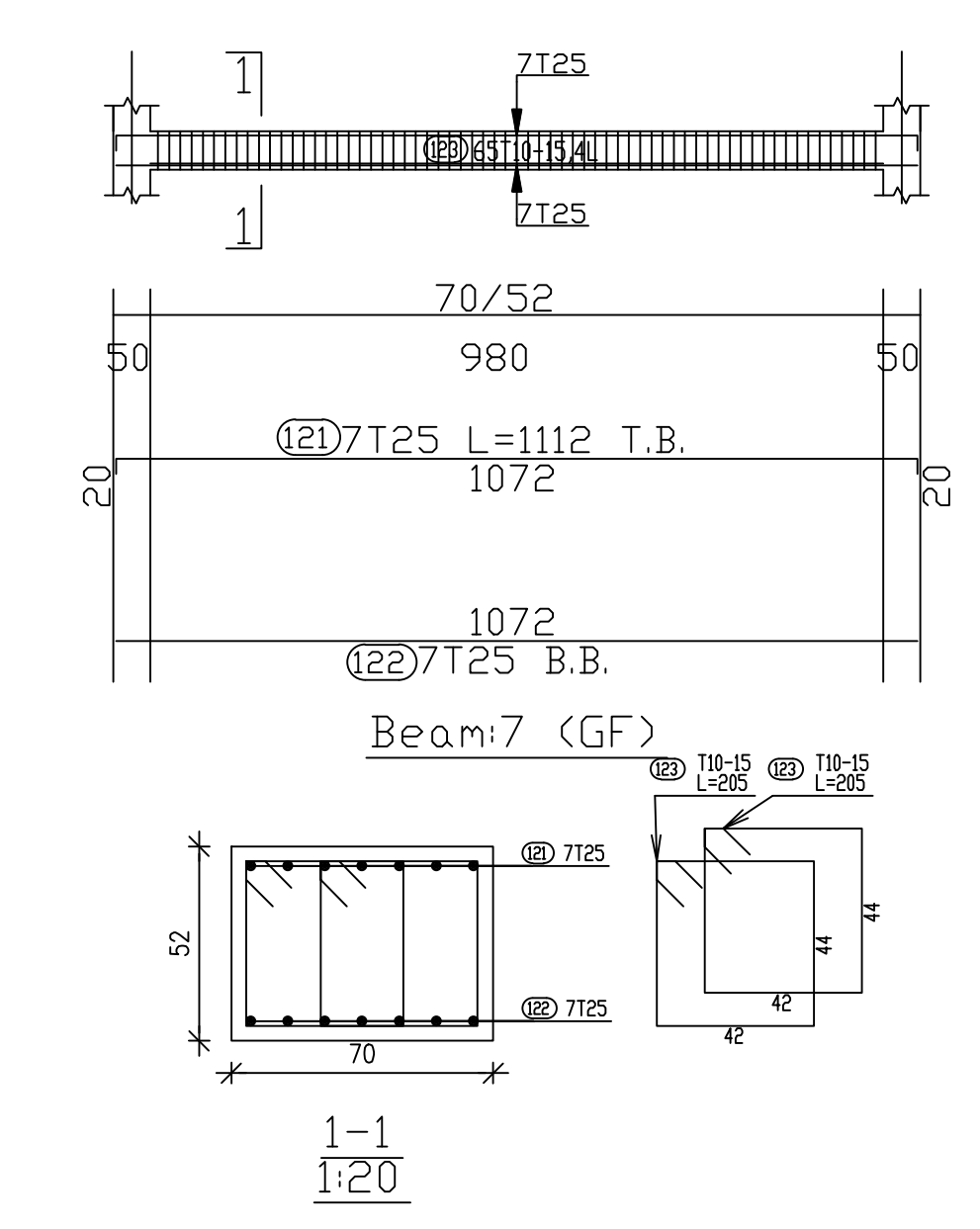
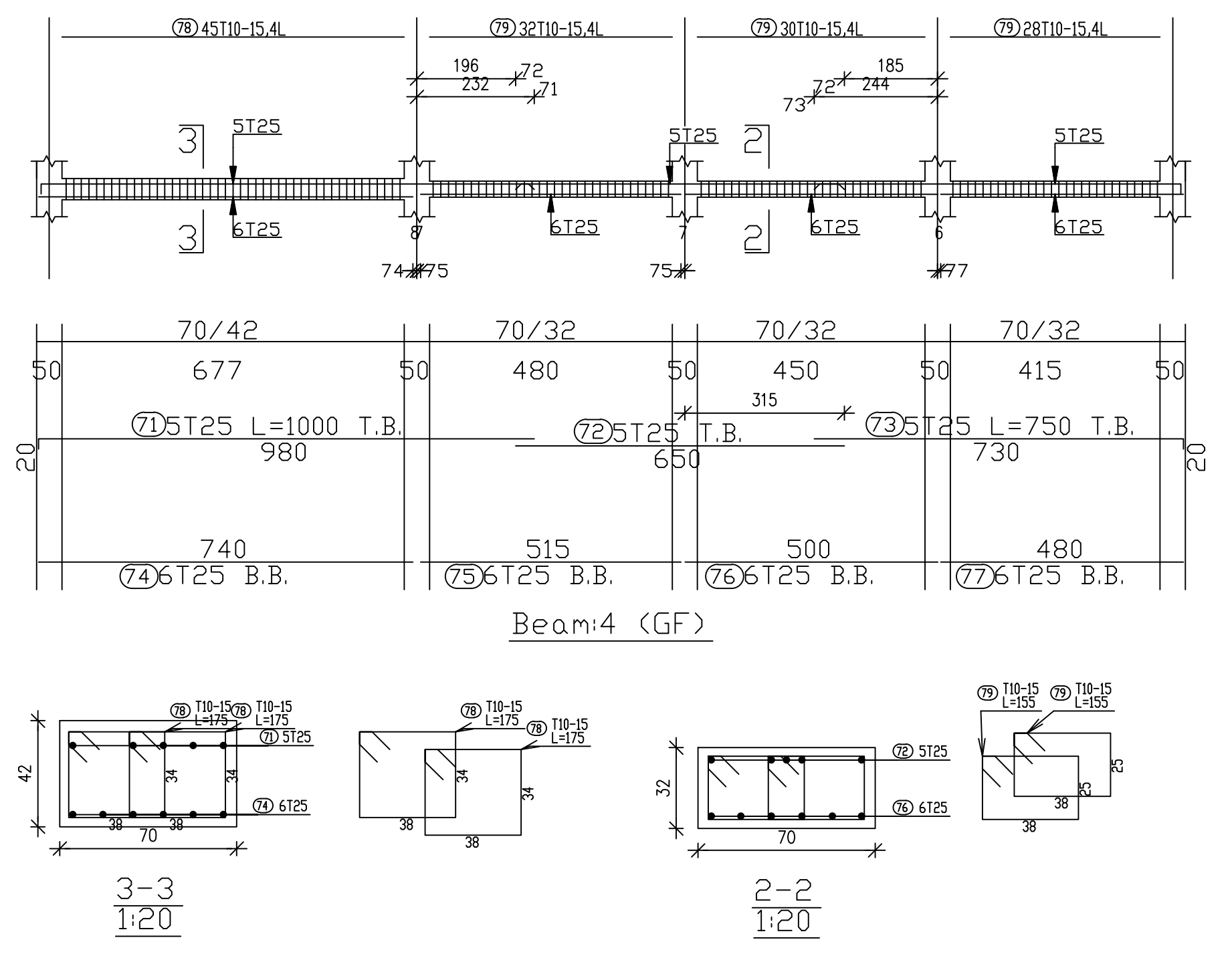
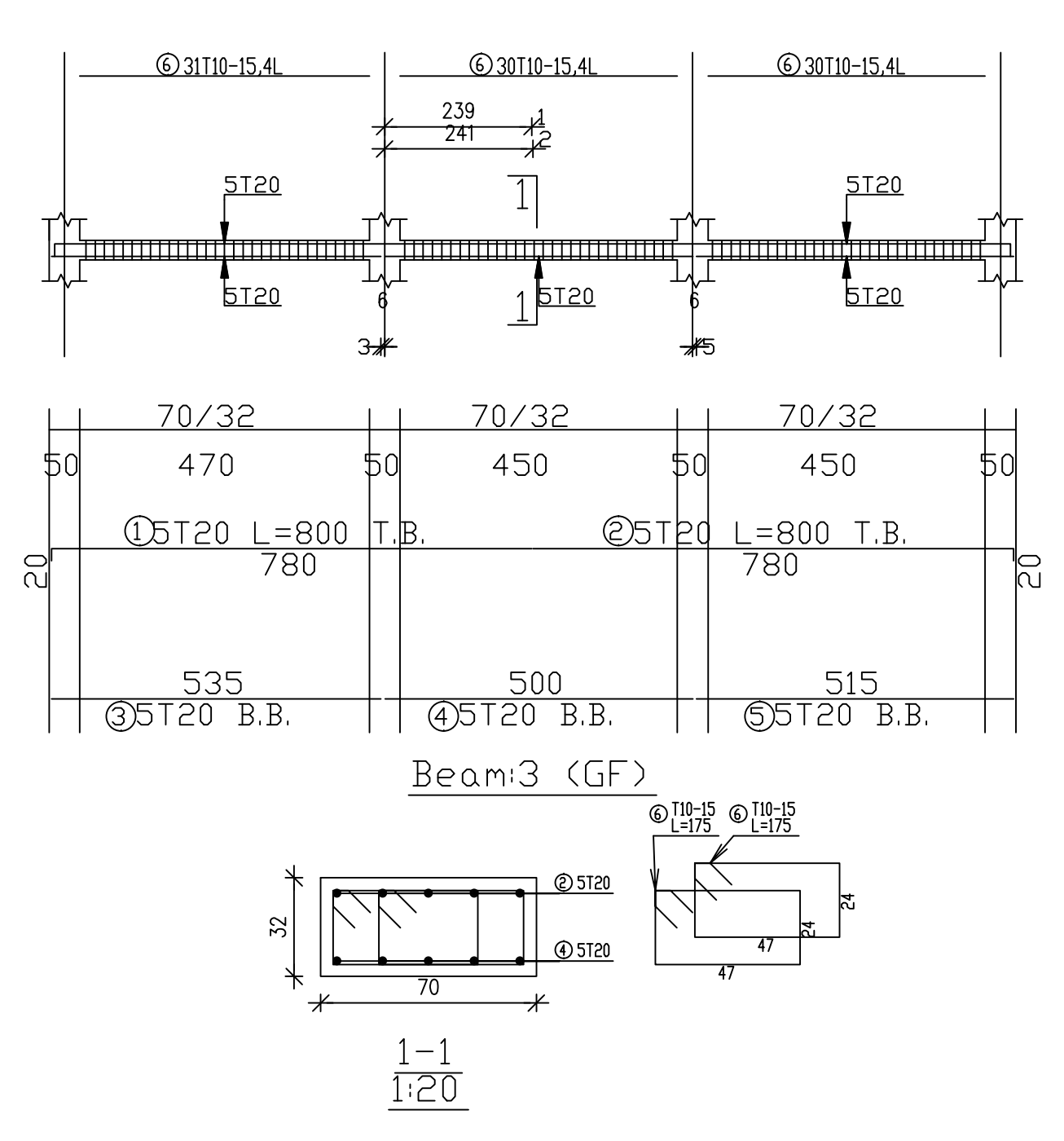
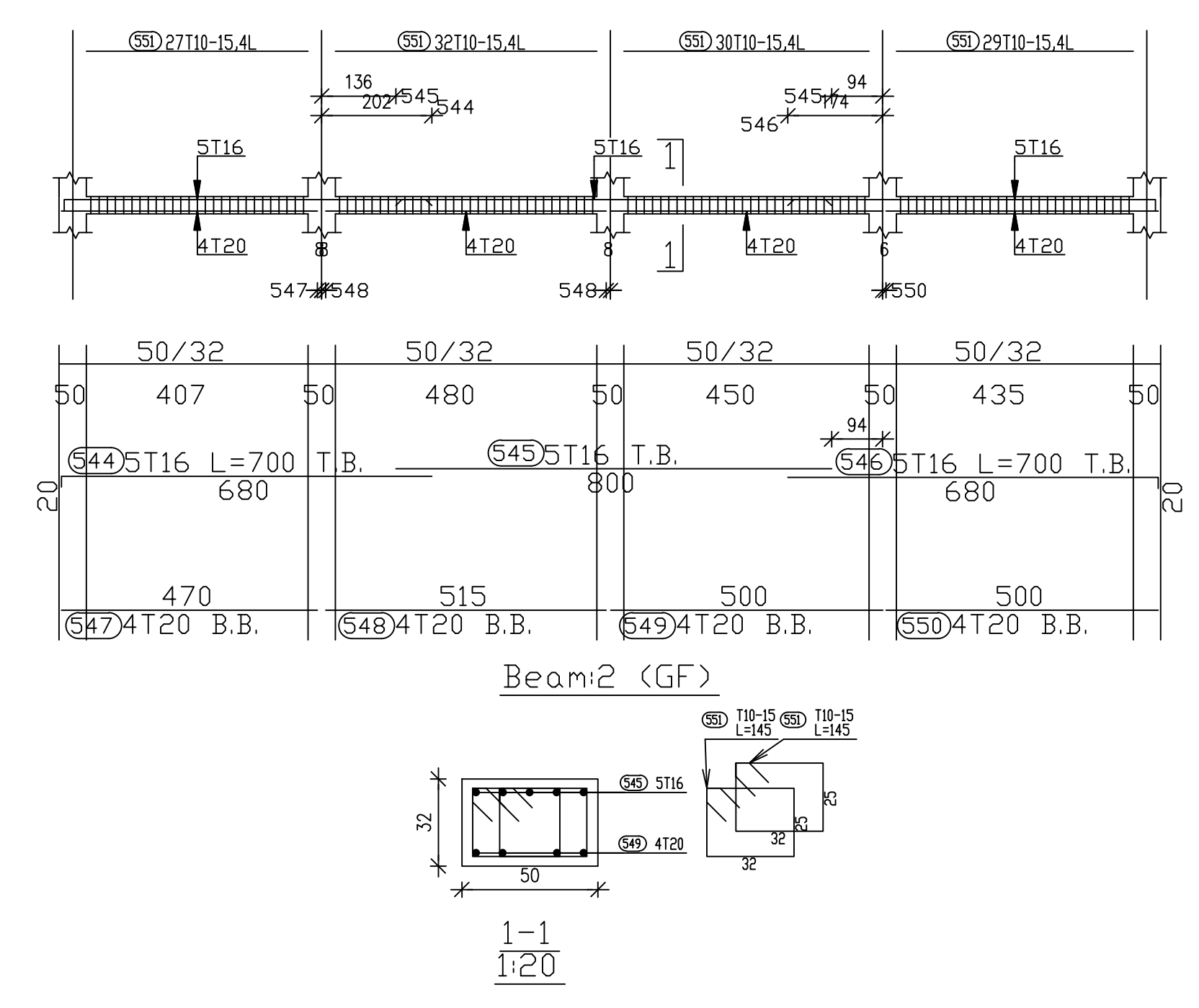
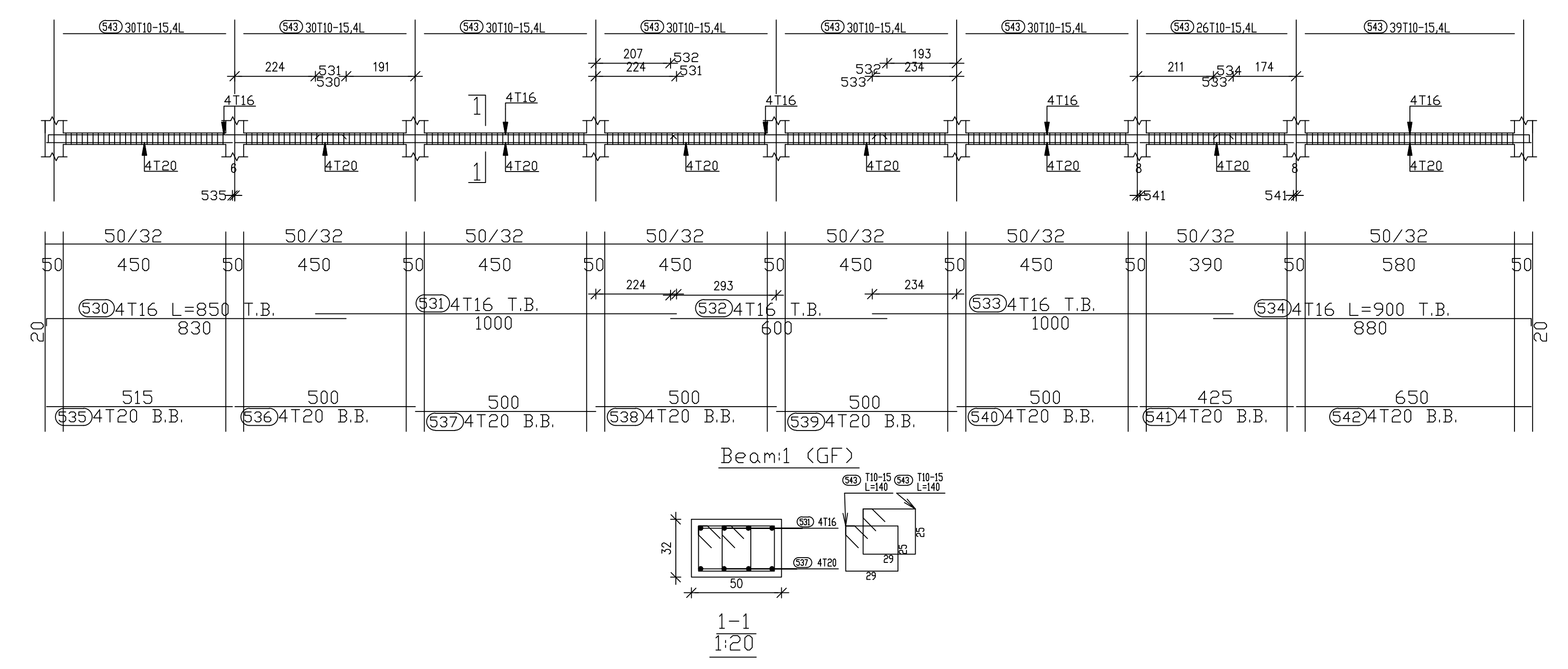
Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah

Designed by :
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem



SCALE	No. of DRAW
1/200	538



Palestine
Polytechnic
University

Engineering College
Civil & Architectural Dept.

Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah
Designed by :

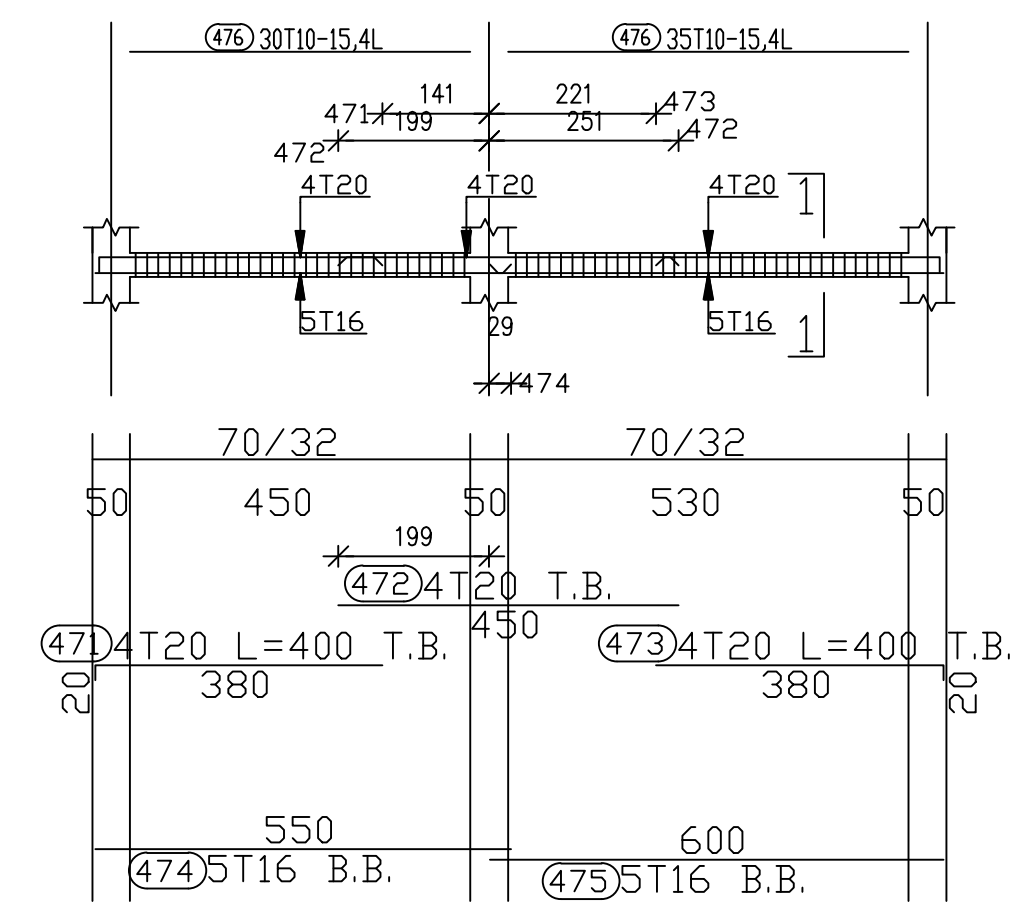
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE

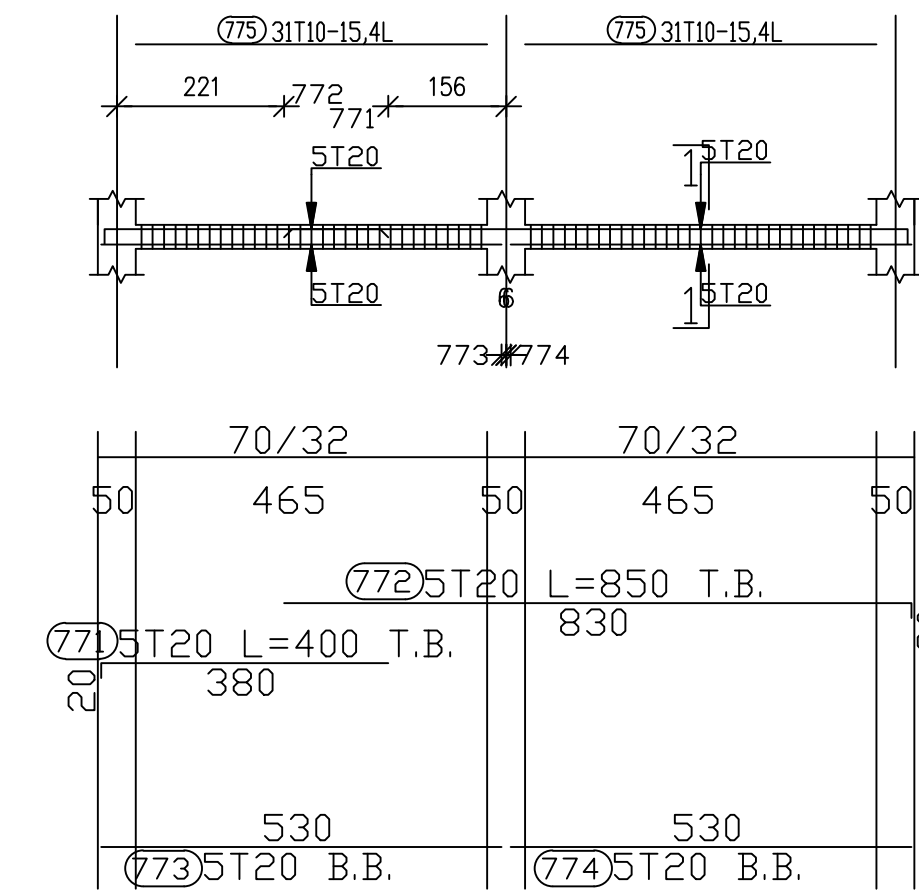
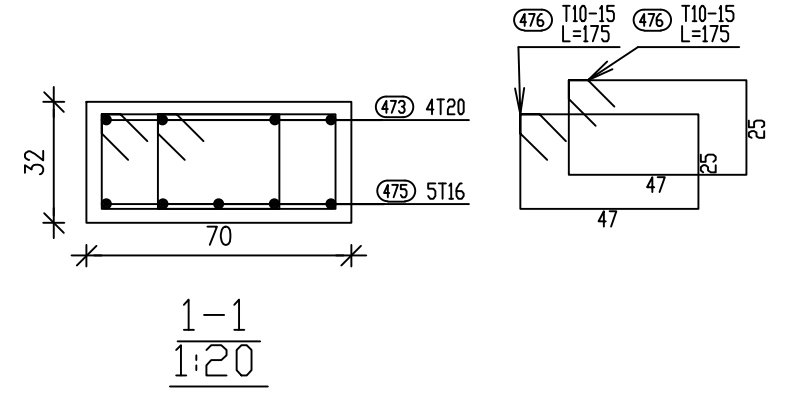
1/200

No. of DRAW

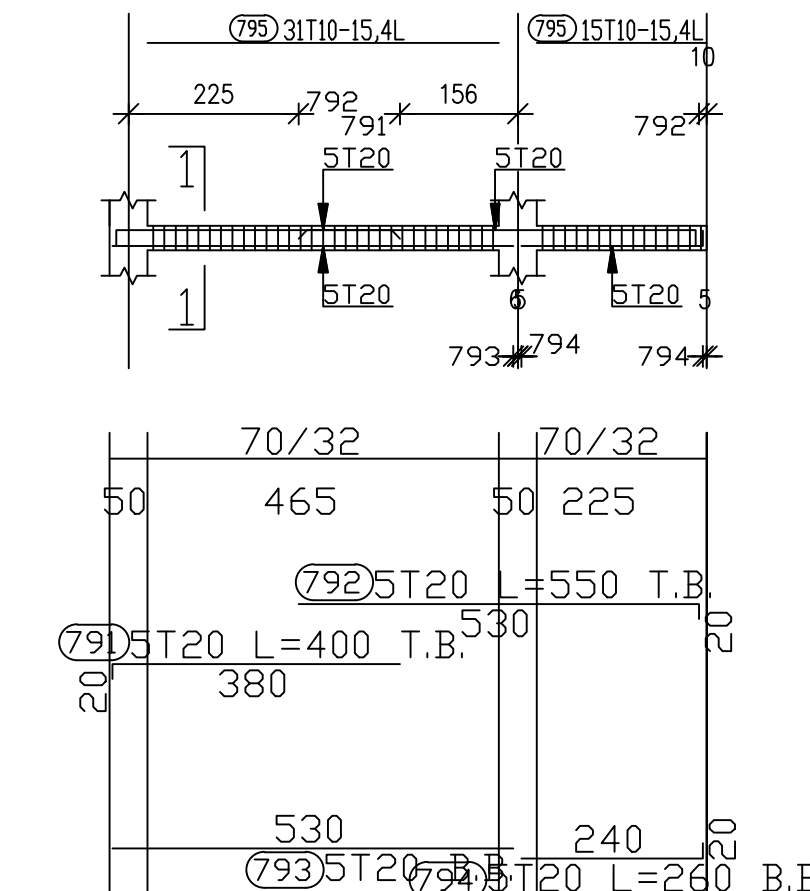
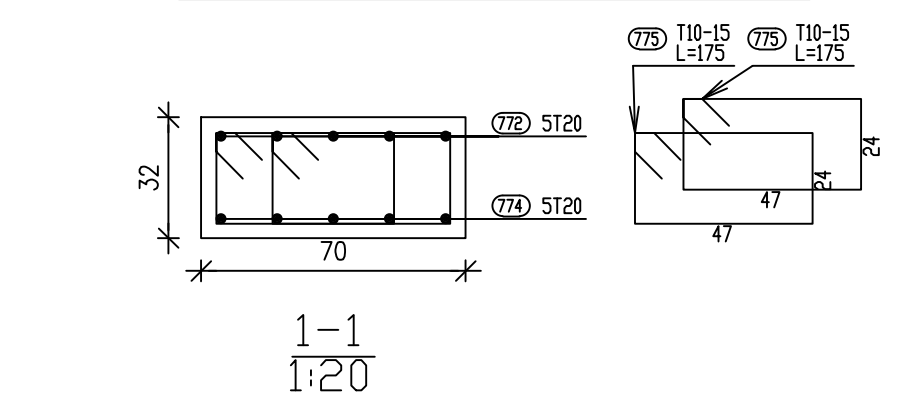
541



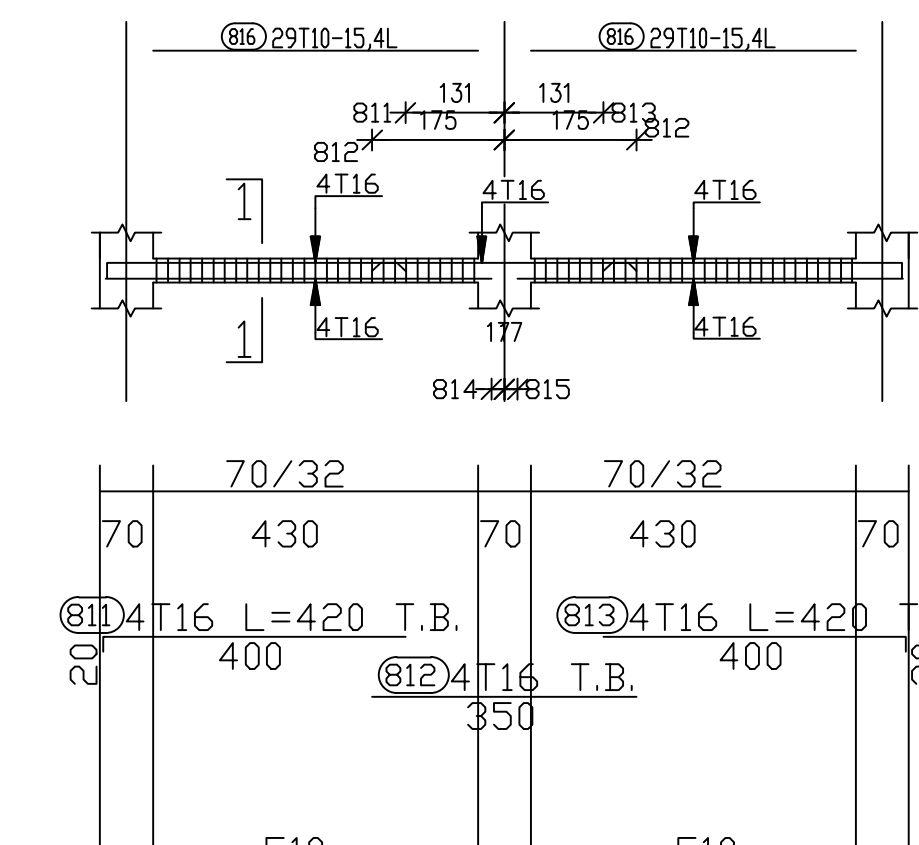
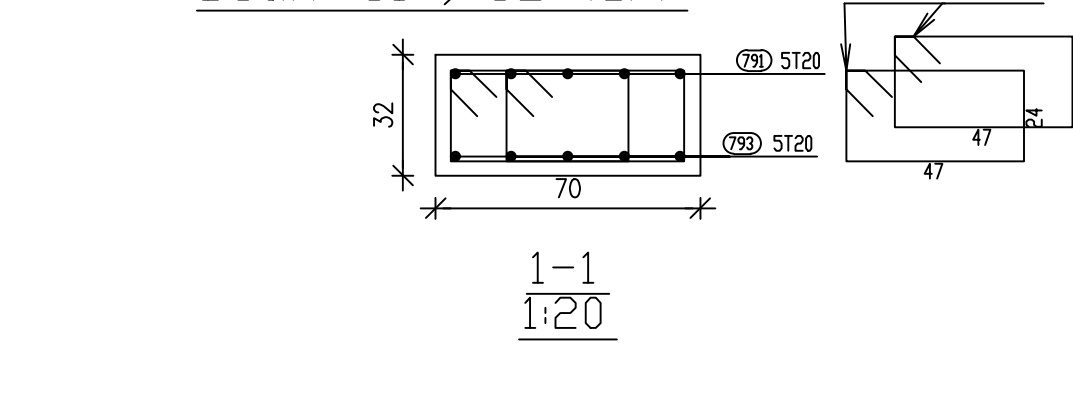
Beam:27(GF)



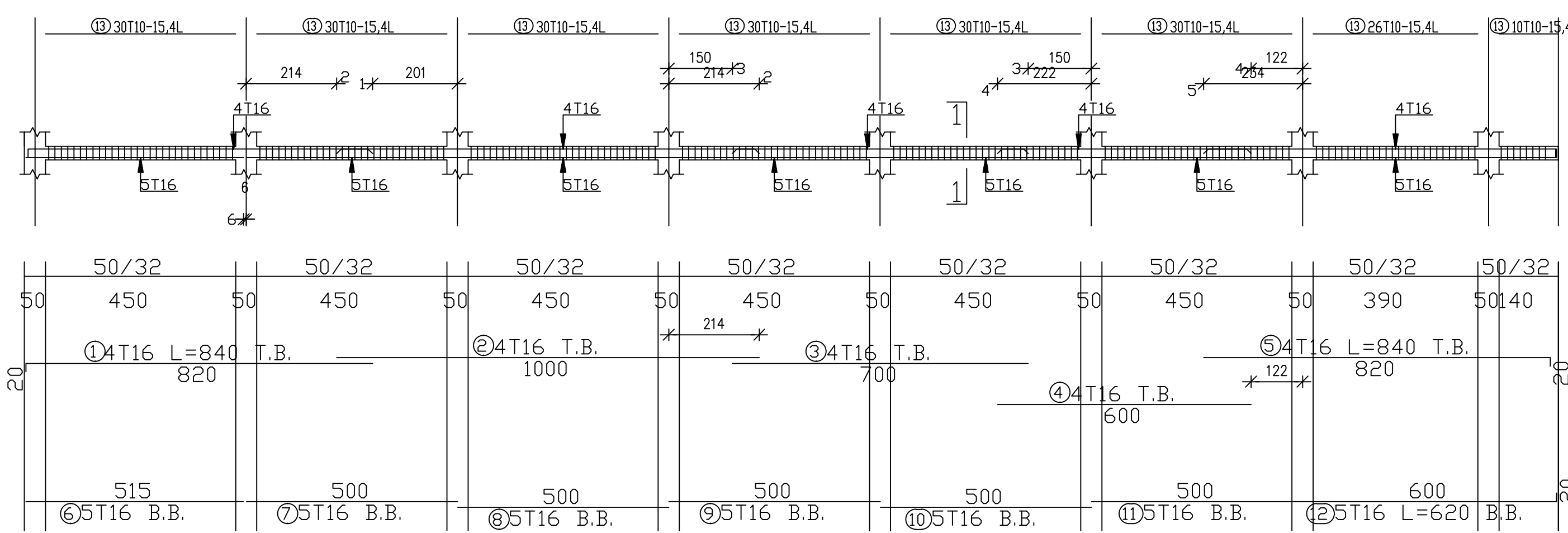
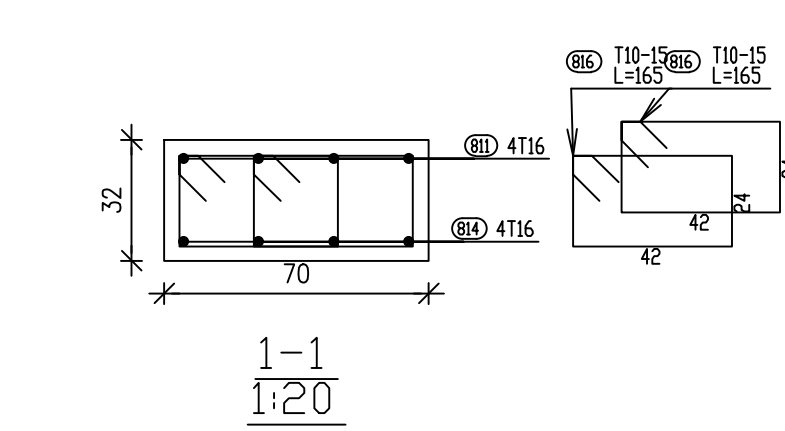
Beam: 28 , 29 , 30 (GF)



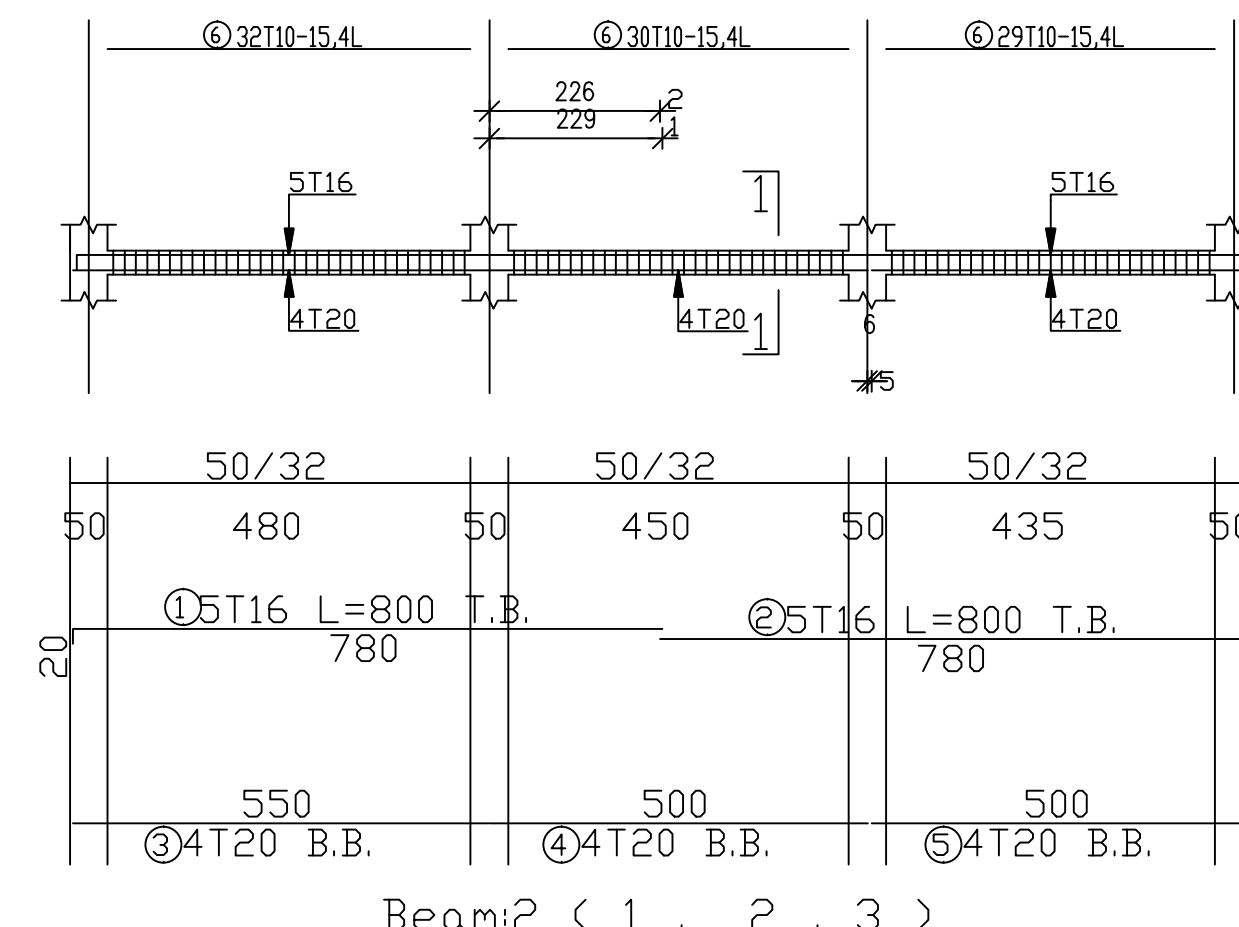
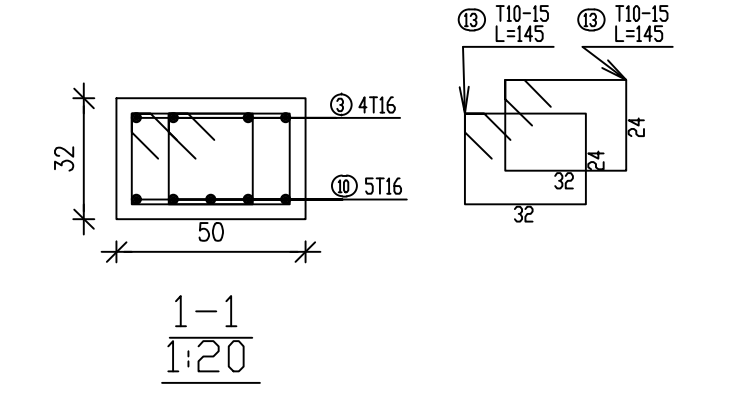
Beam: 31 , 32 (GF)



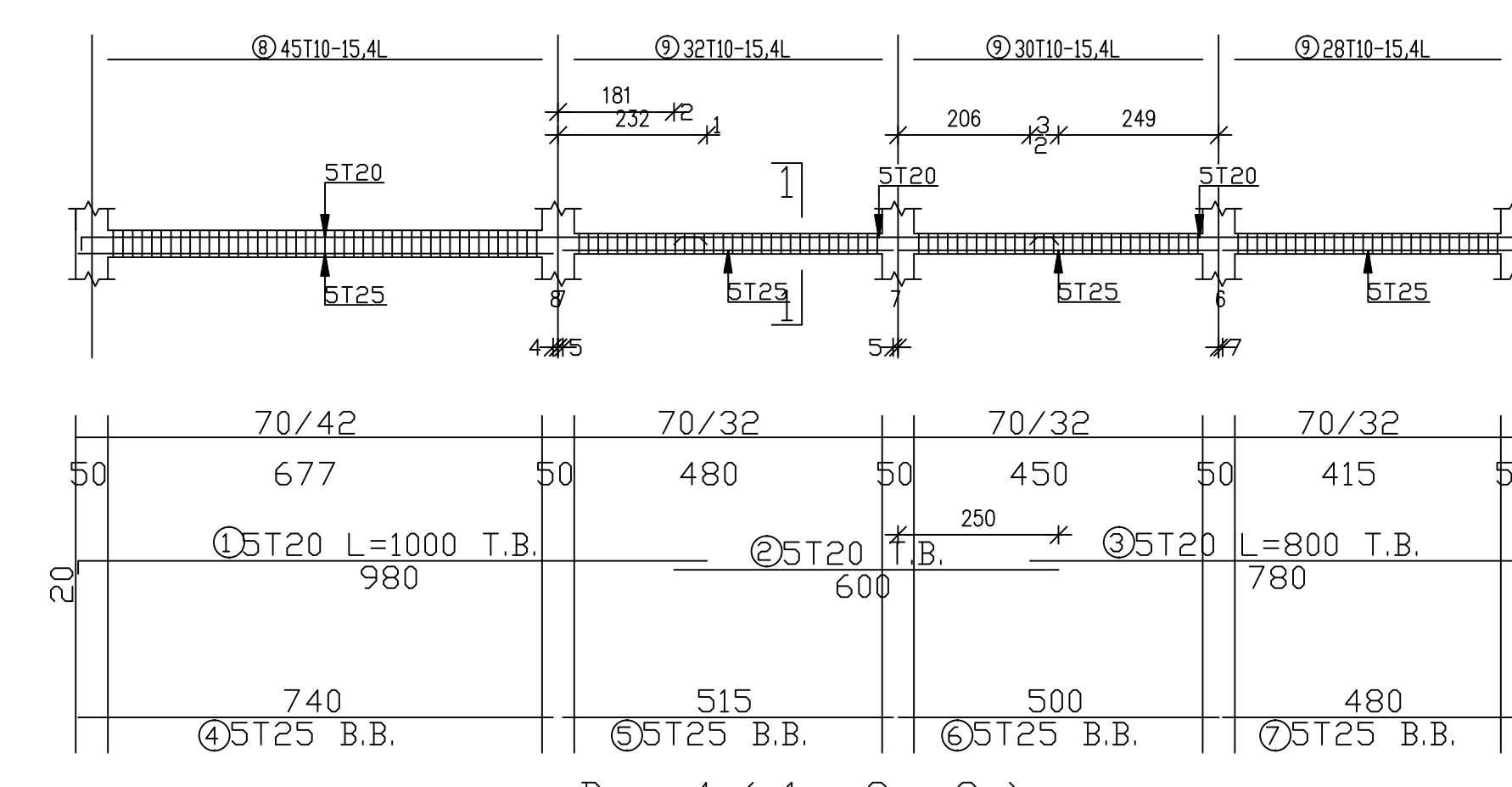
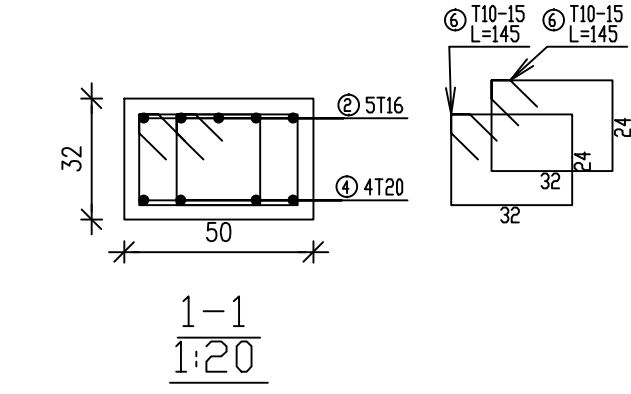
Beam: 33 (GF)



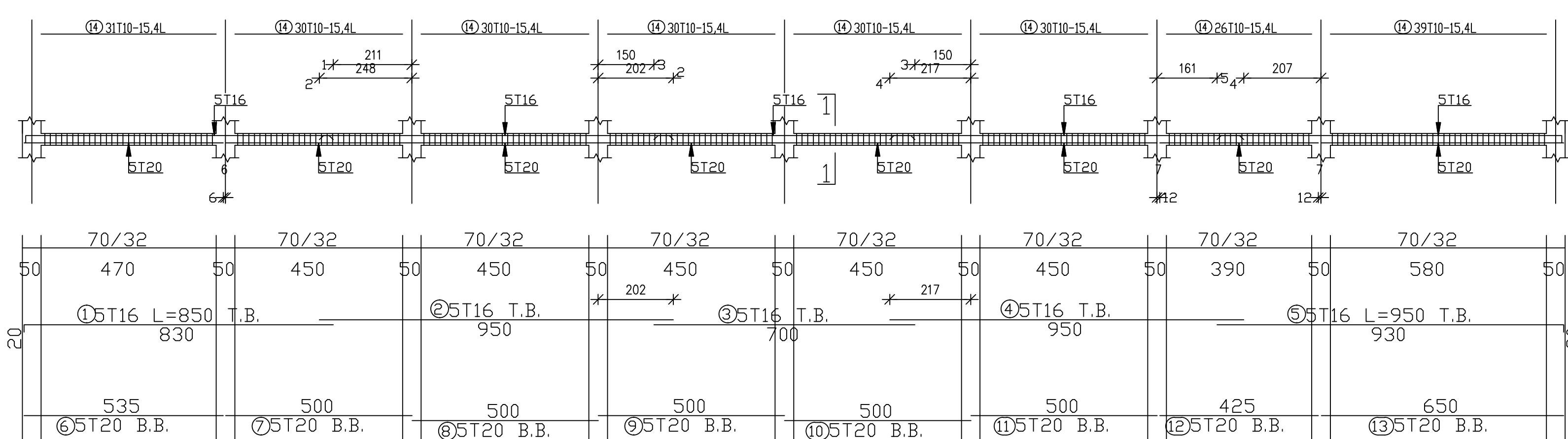
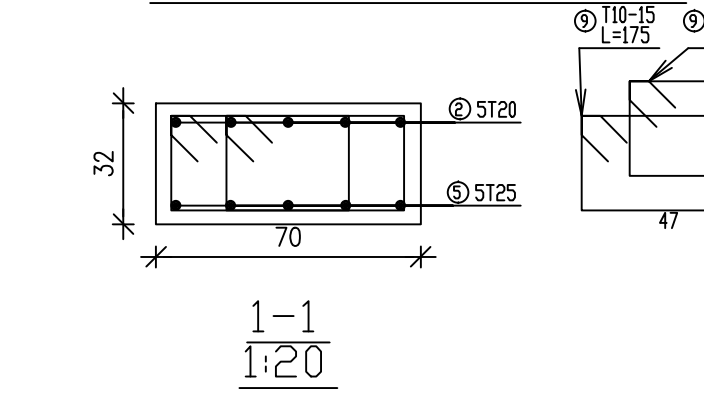
Beam:1 (1 , 2 , 3)



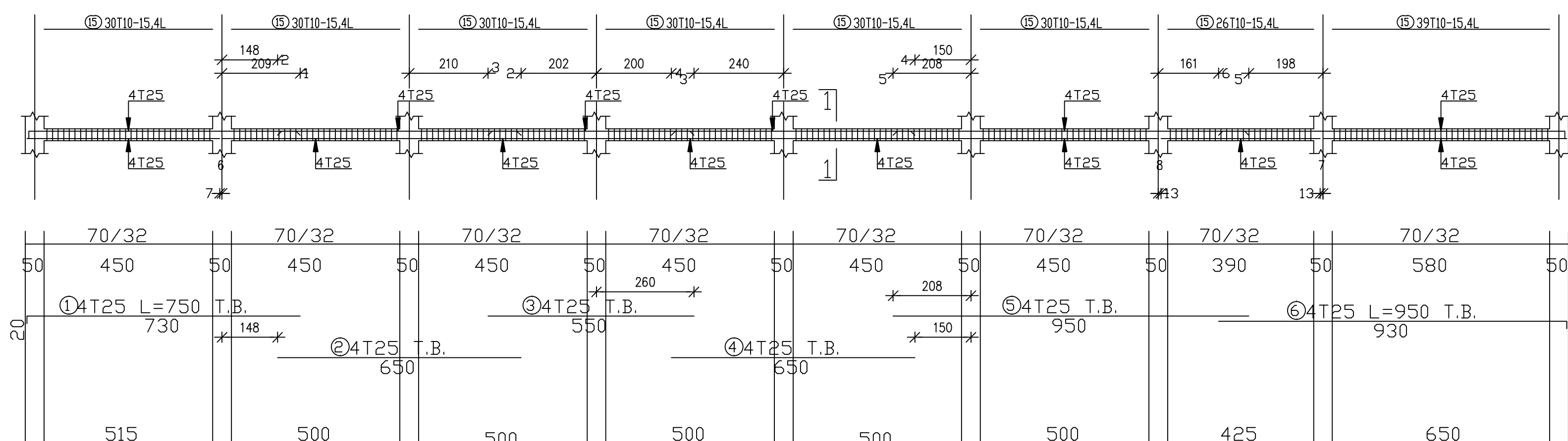
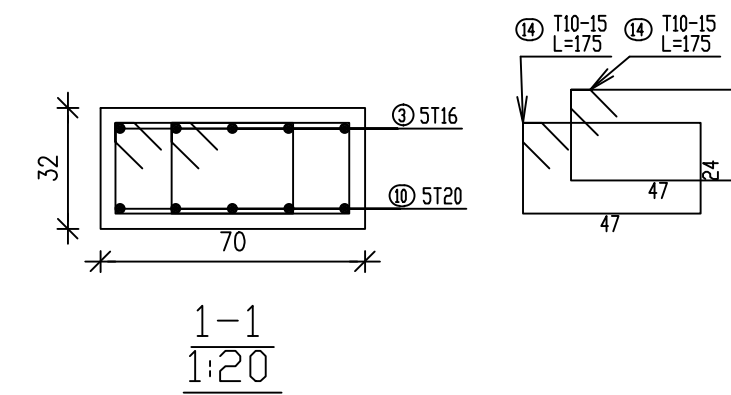
Beam:2 (1 , 2 , 3)



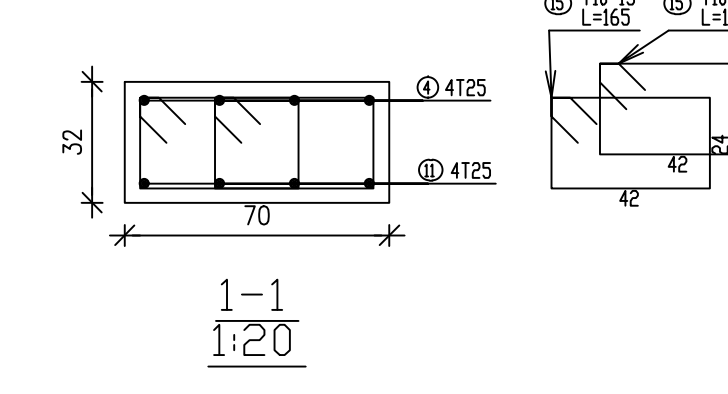
Beam:4 (1 , 2 , 3)



Beam:3 (1 , 2 , 3)



Beam:5 (1 , 2 , 3)





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Civil & Architectural Dept.

Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :

Eng- shadi qumsiah

Designed by :

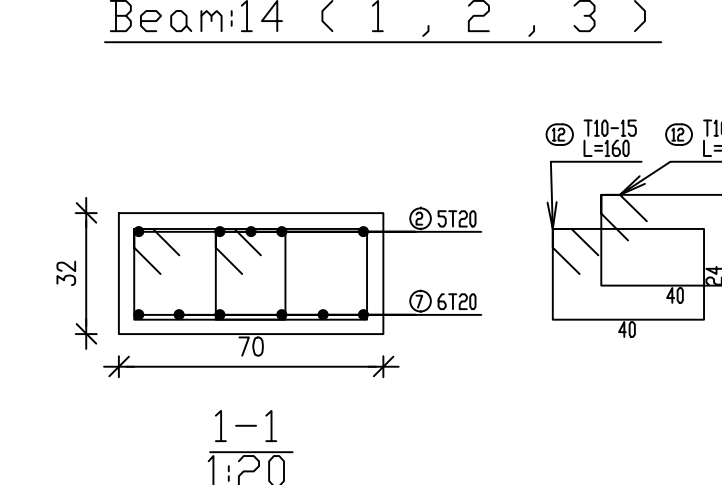
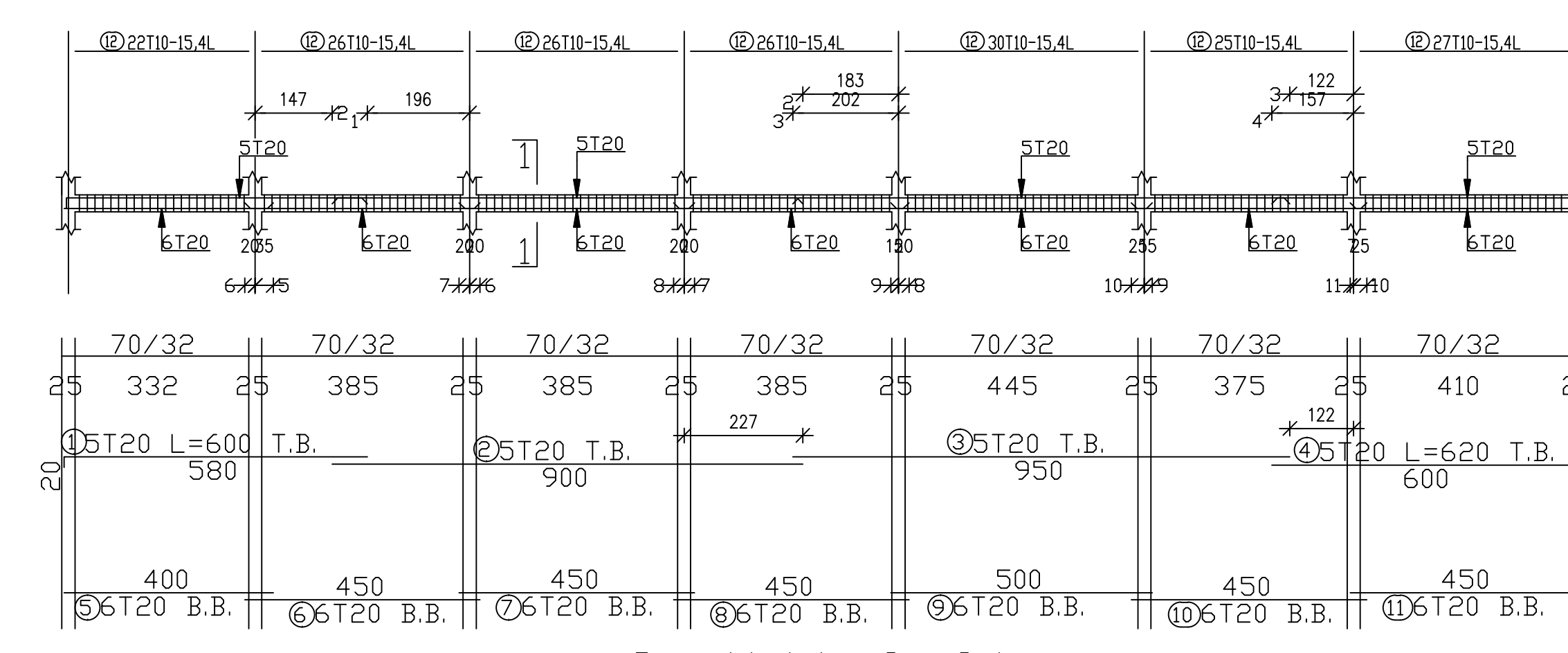
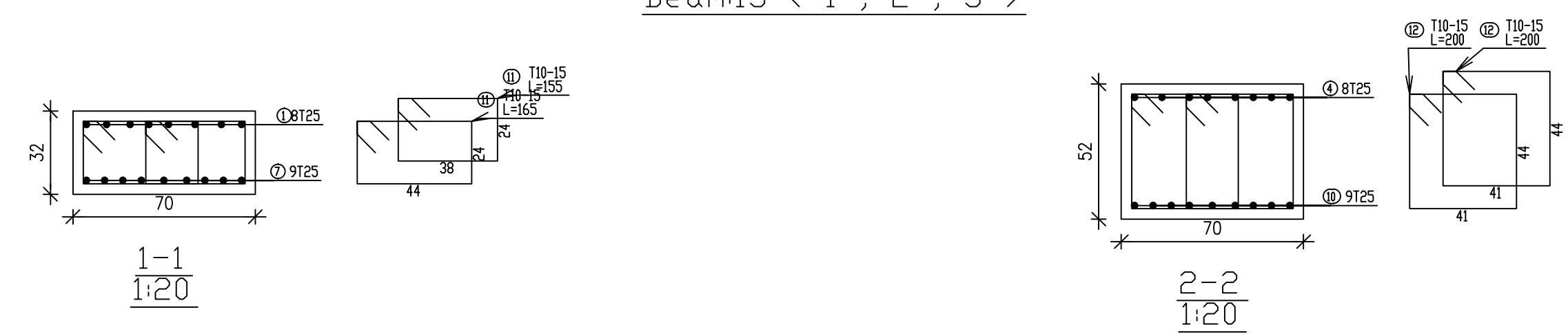
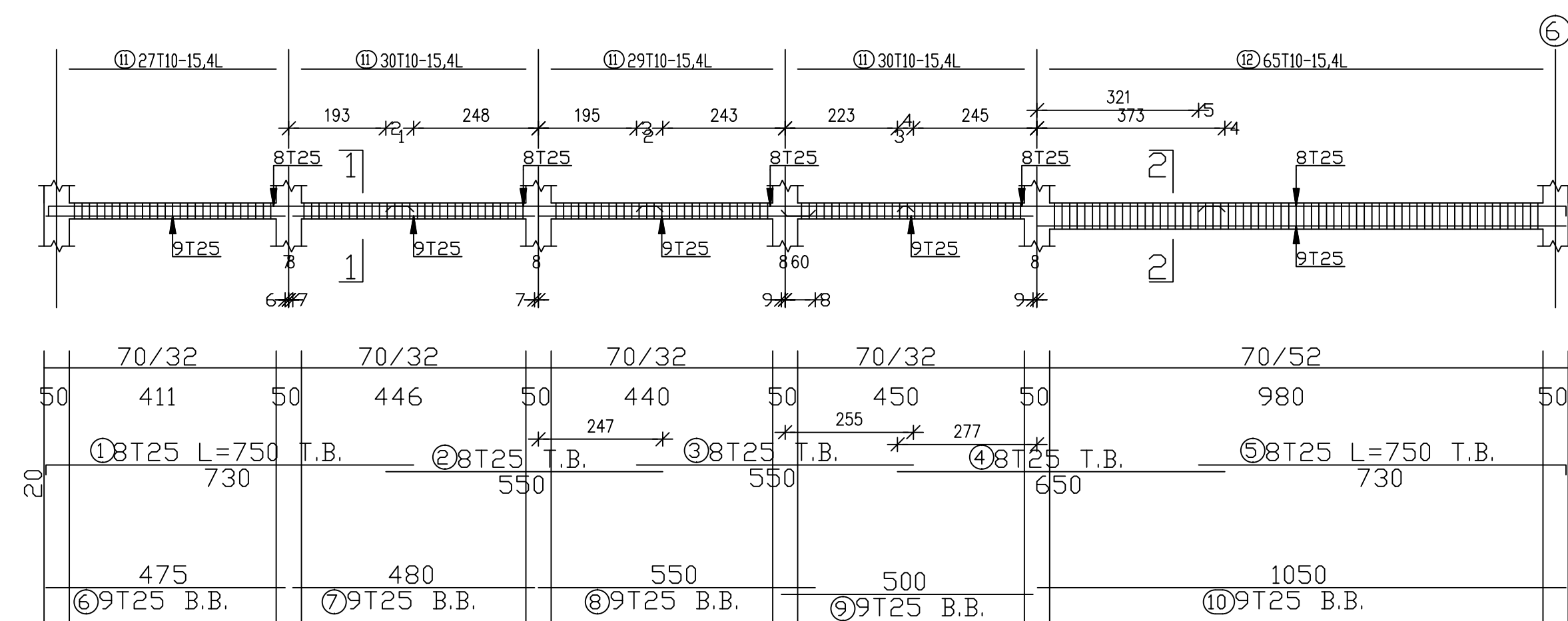
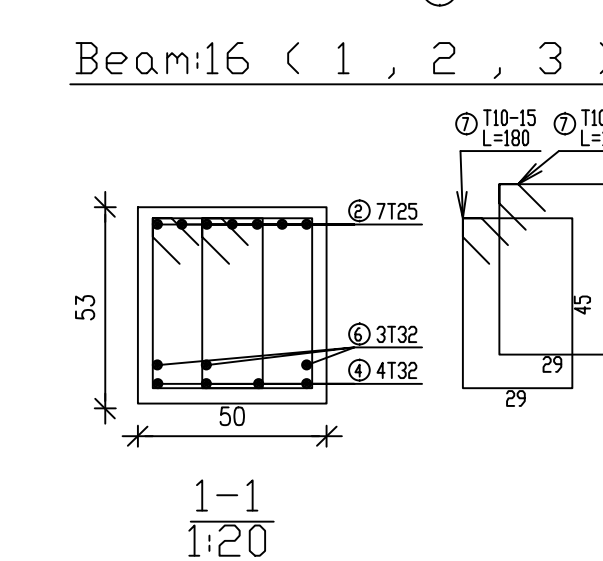
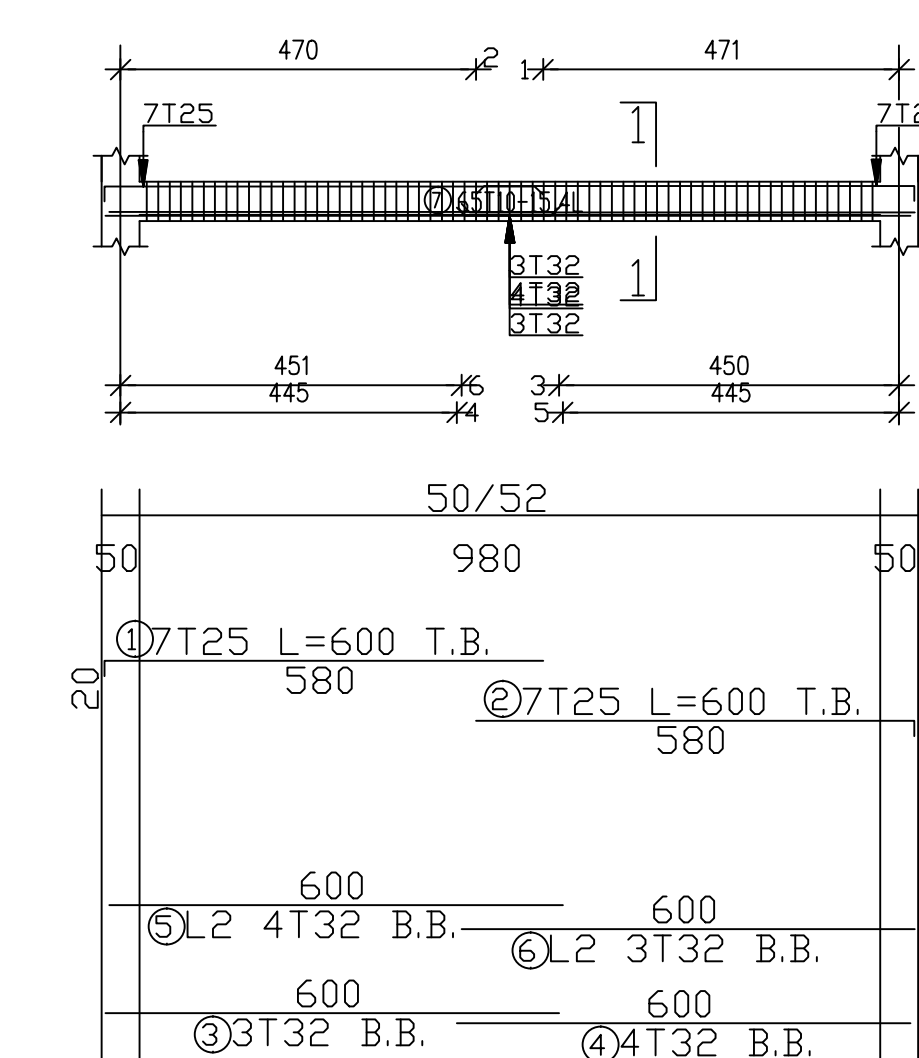
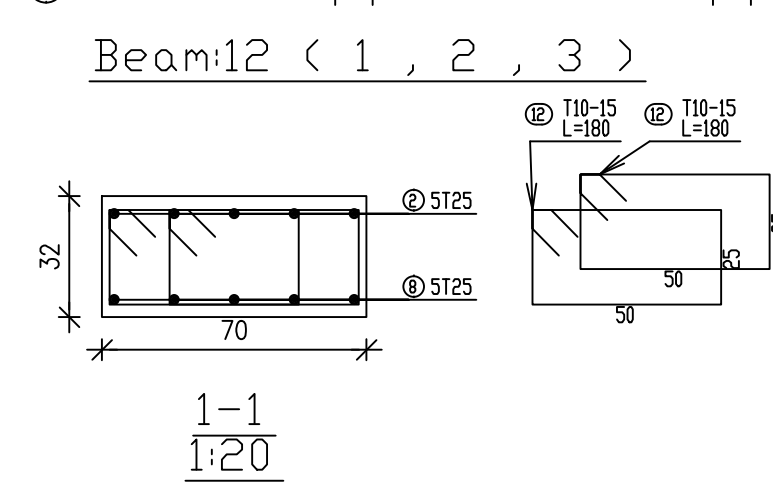
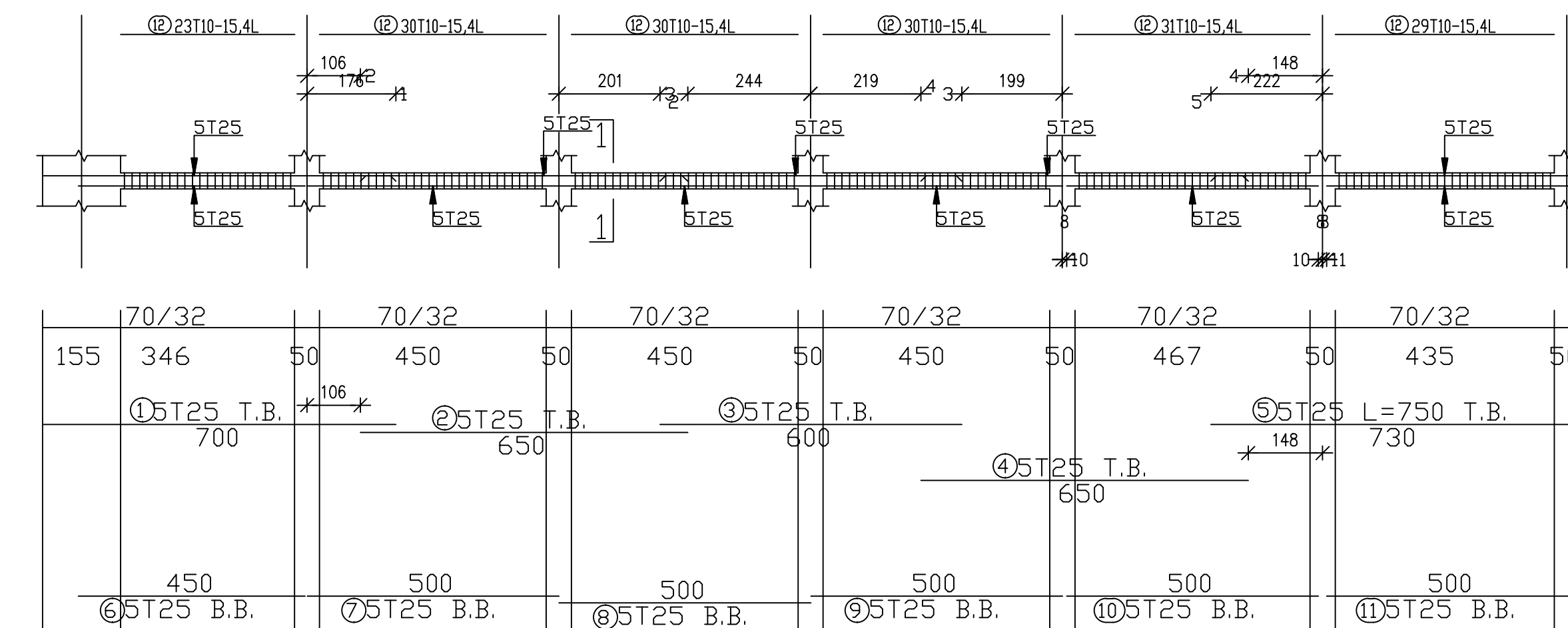
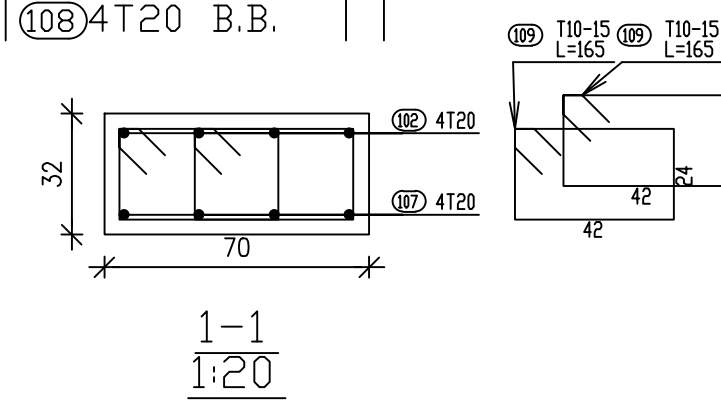
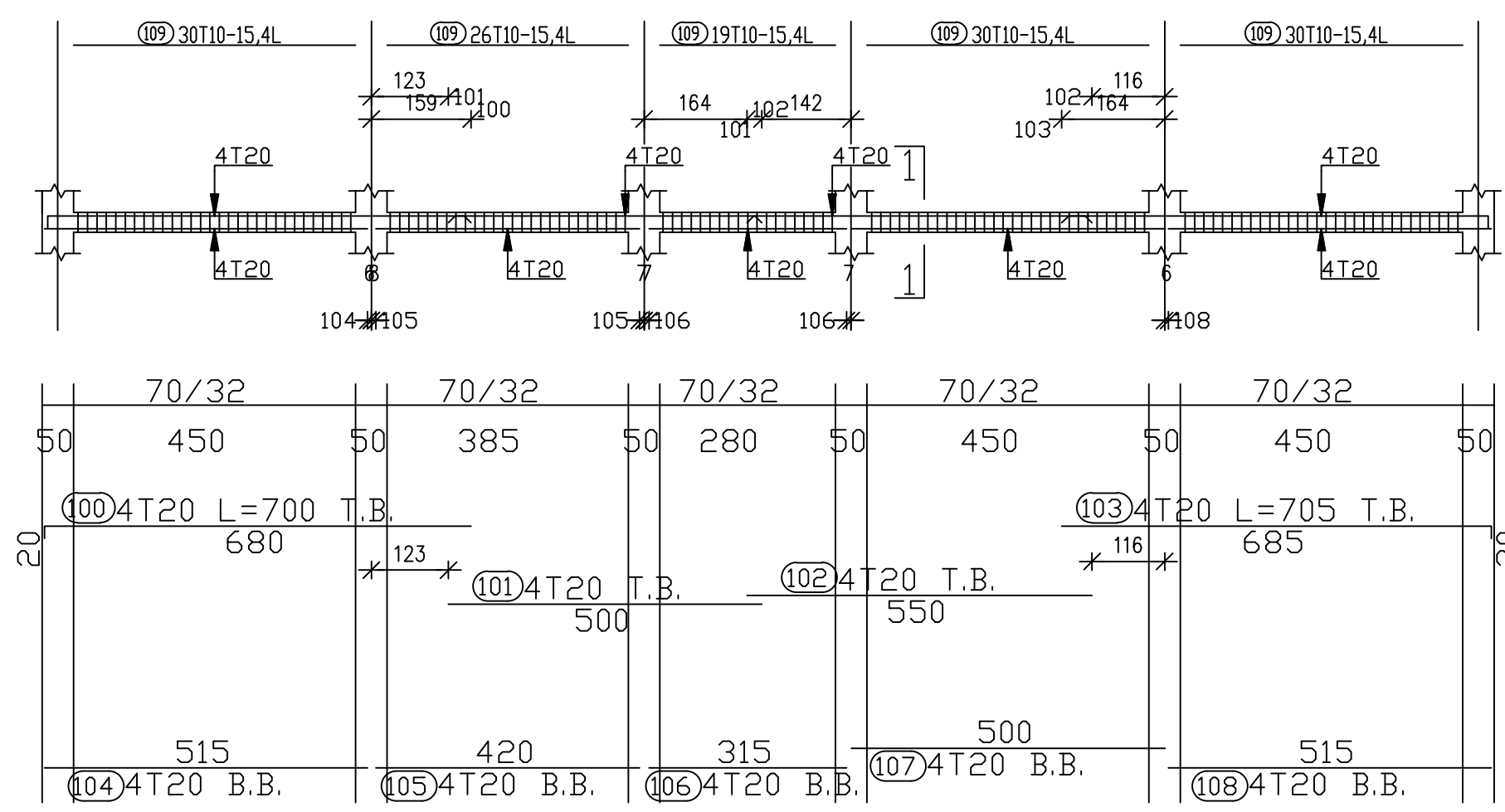
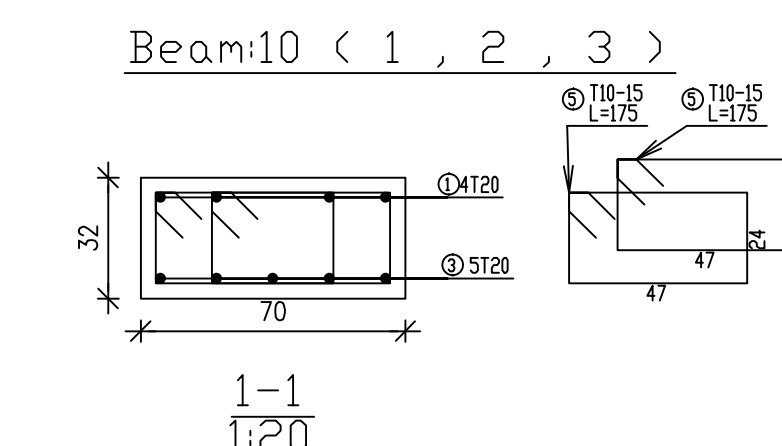
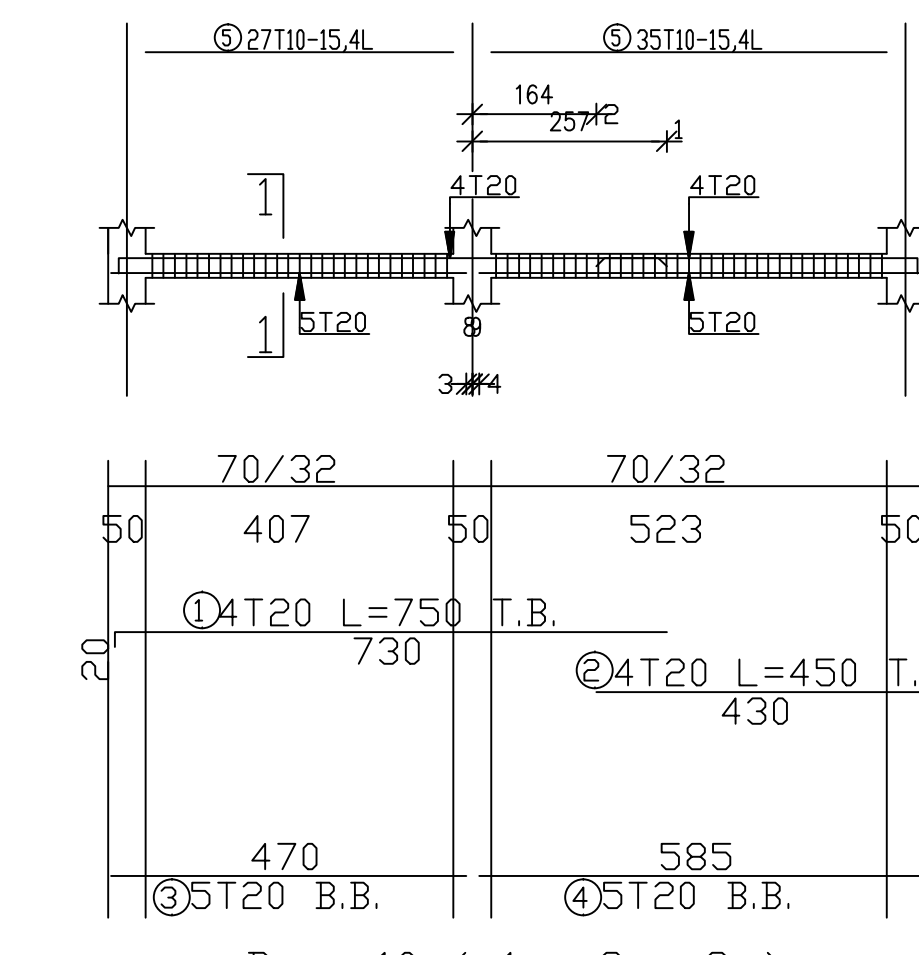
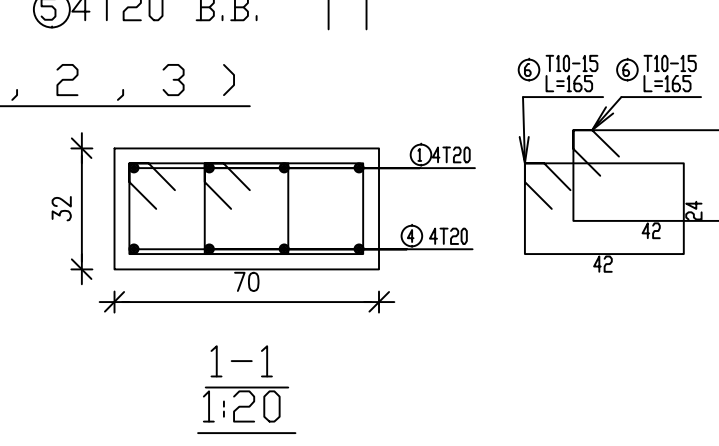
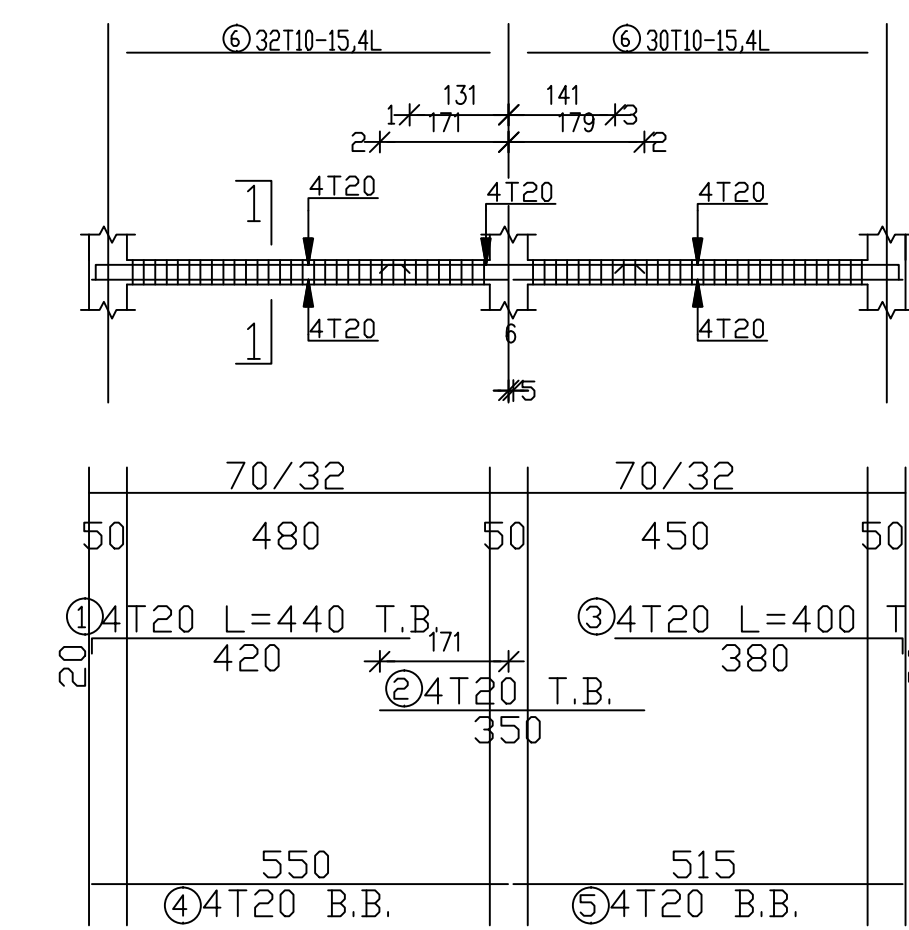
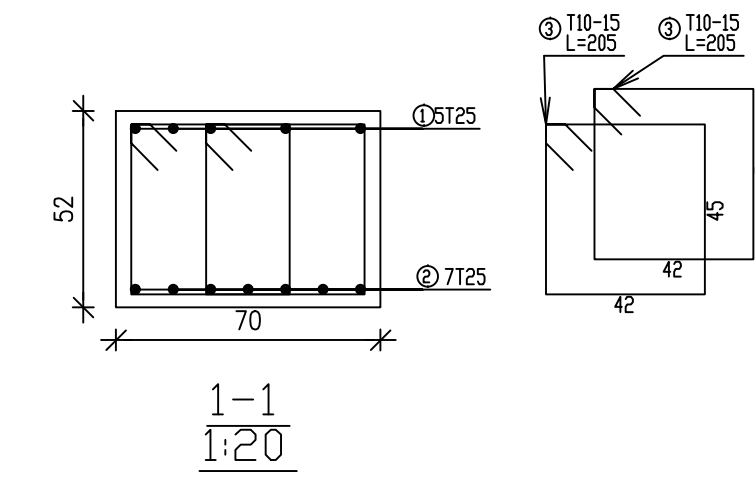
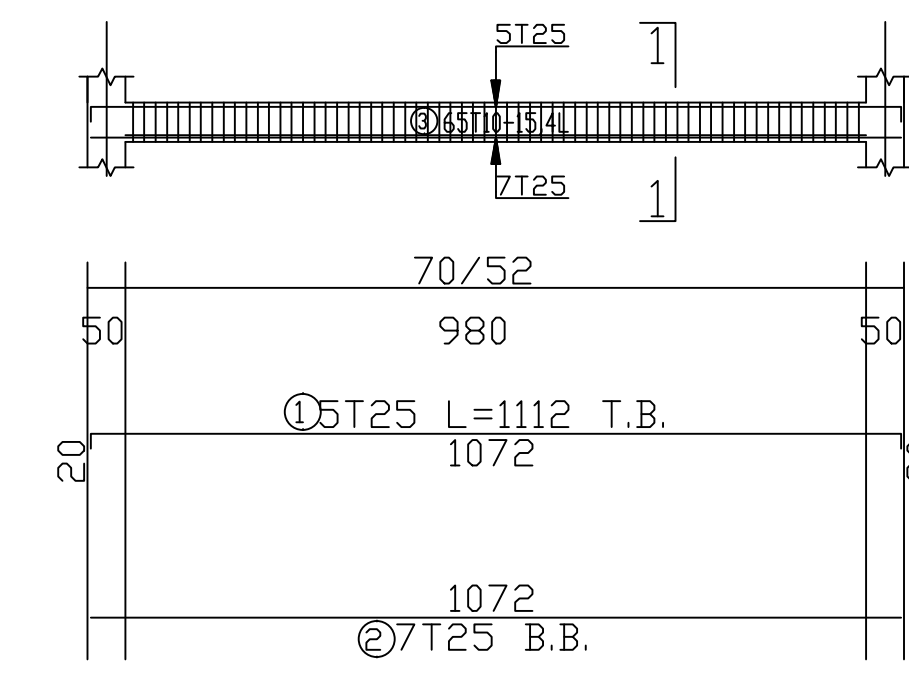
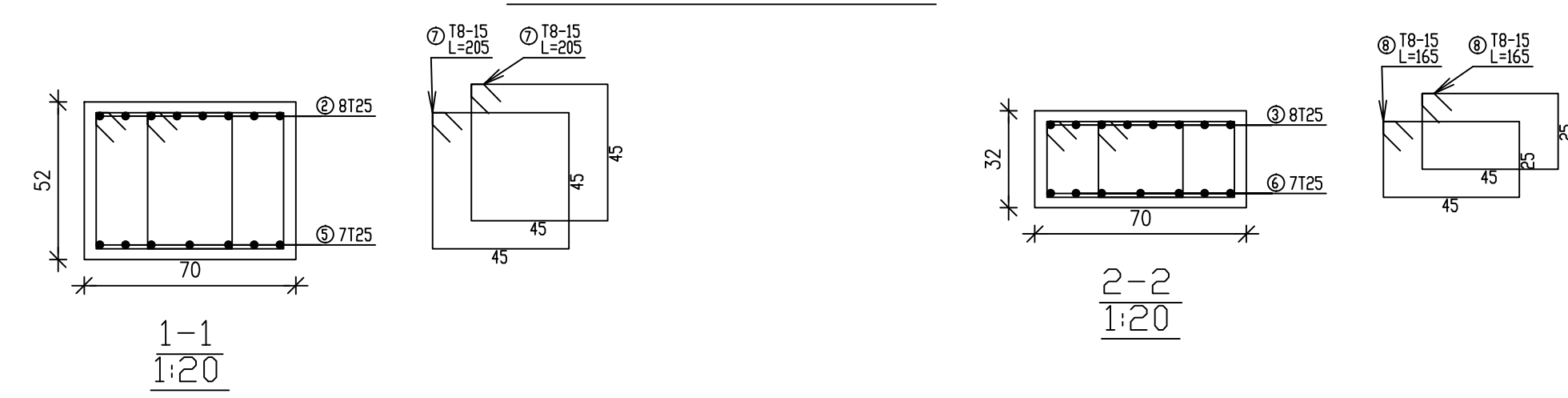
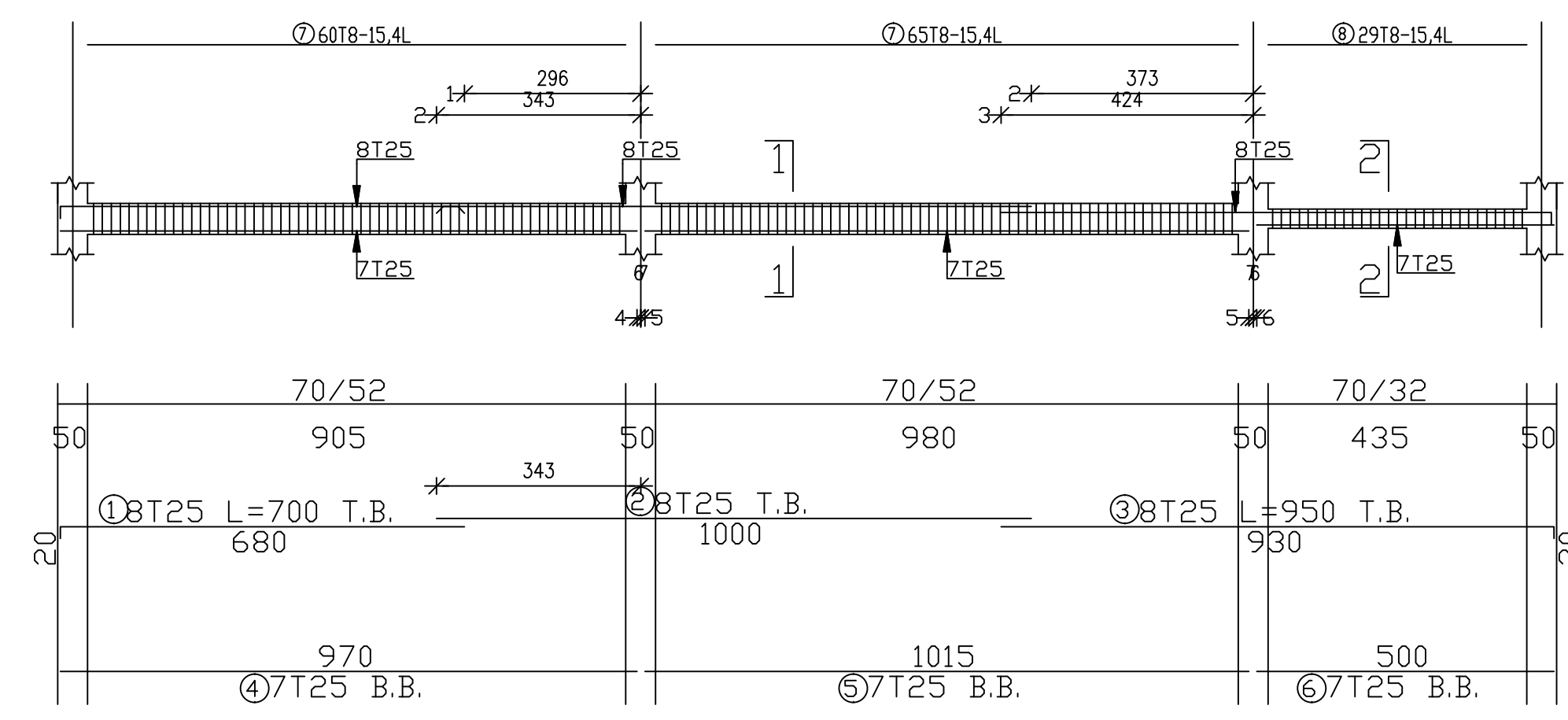
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE

1/200

No. of DRAW

542





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Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :

Eng- shadi qumsiah
Designed by :

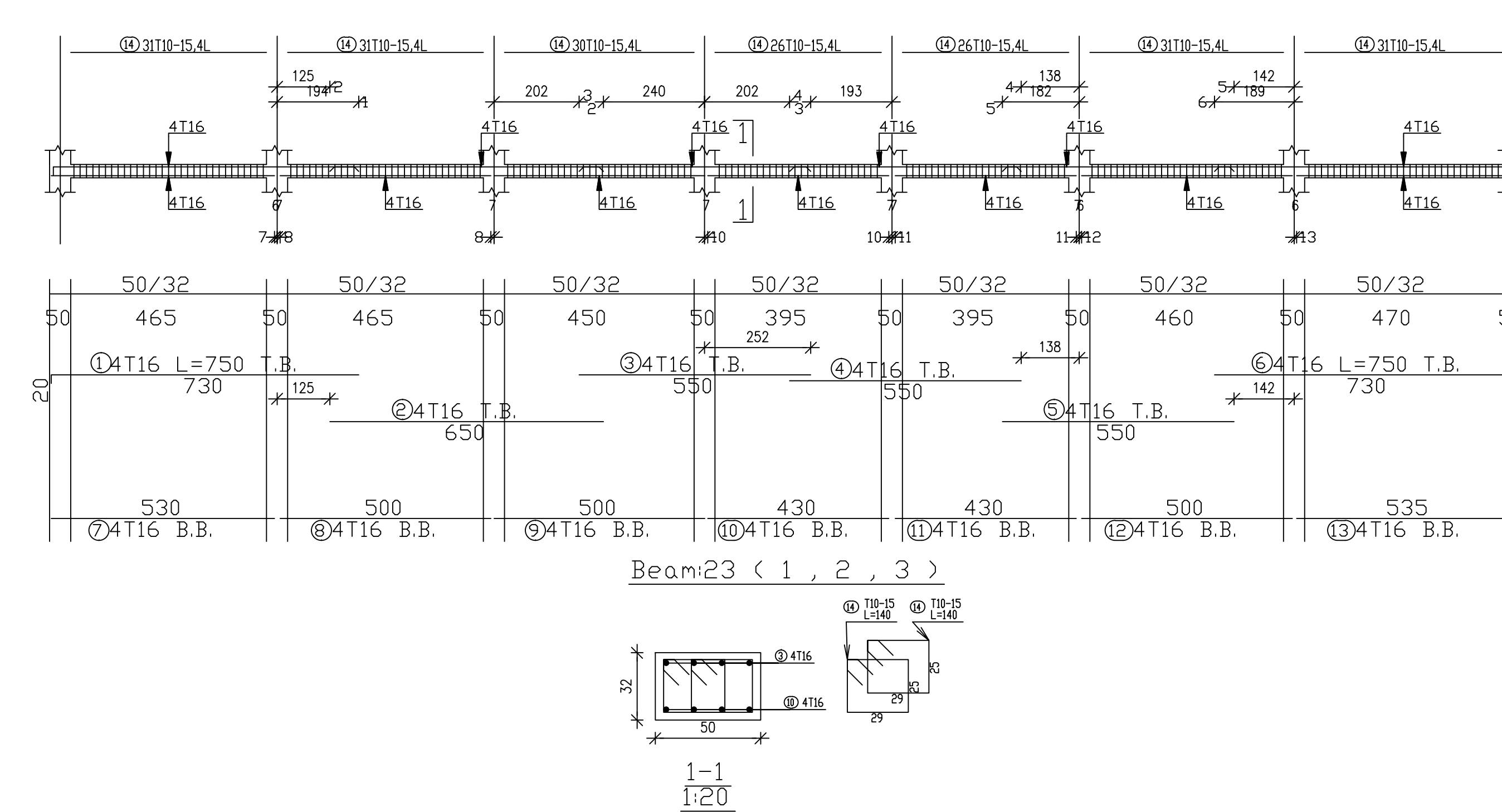
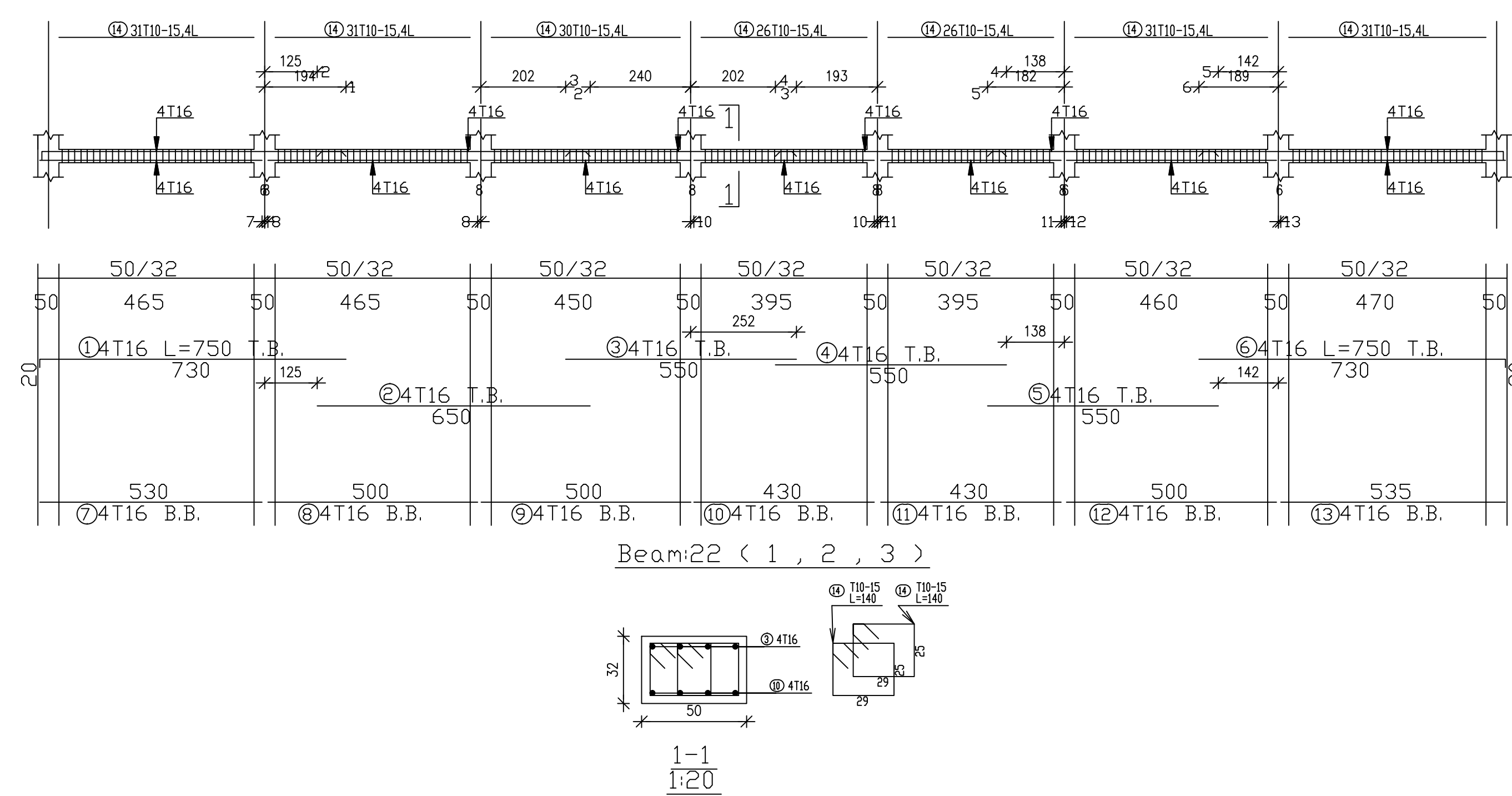
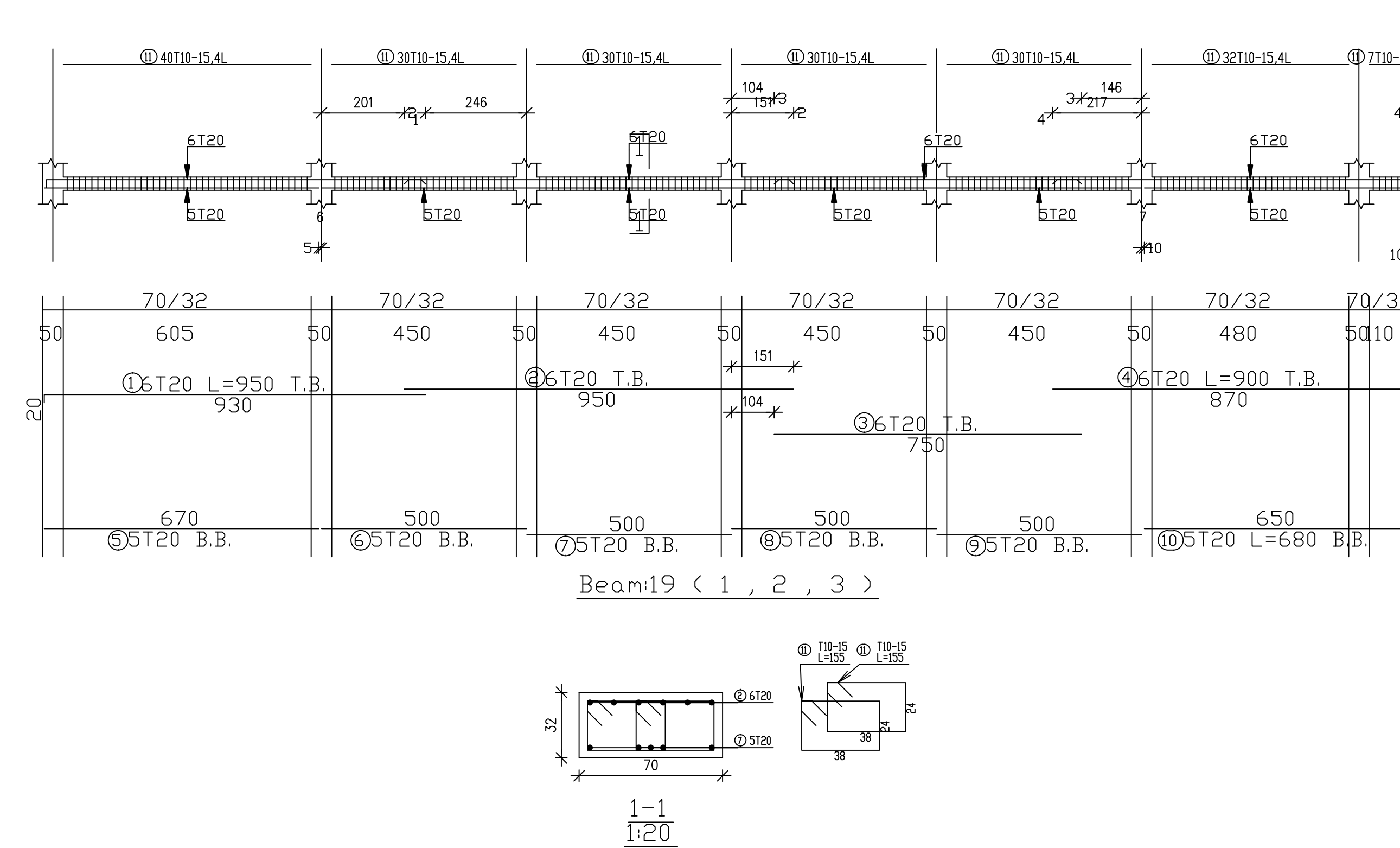
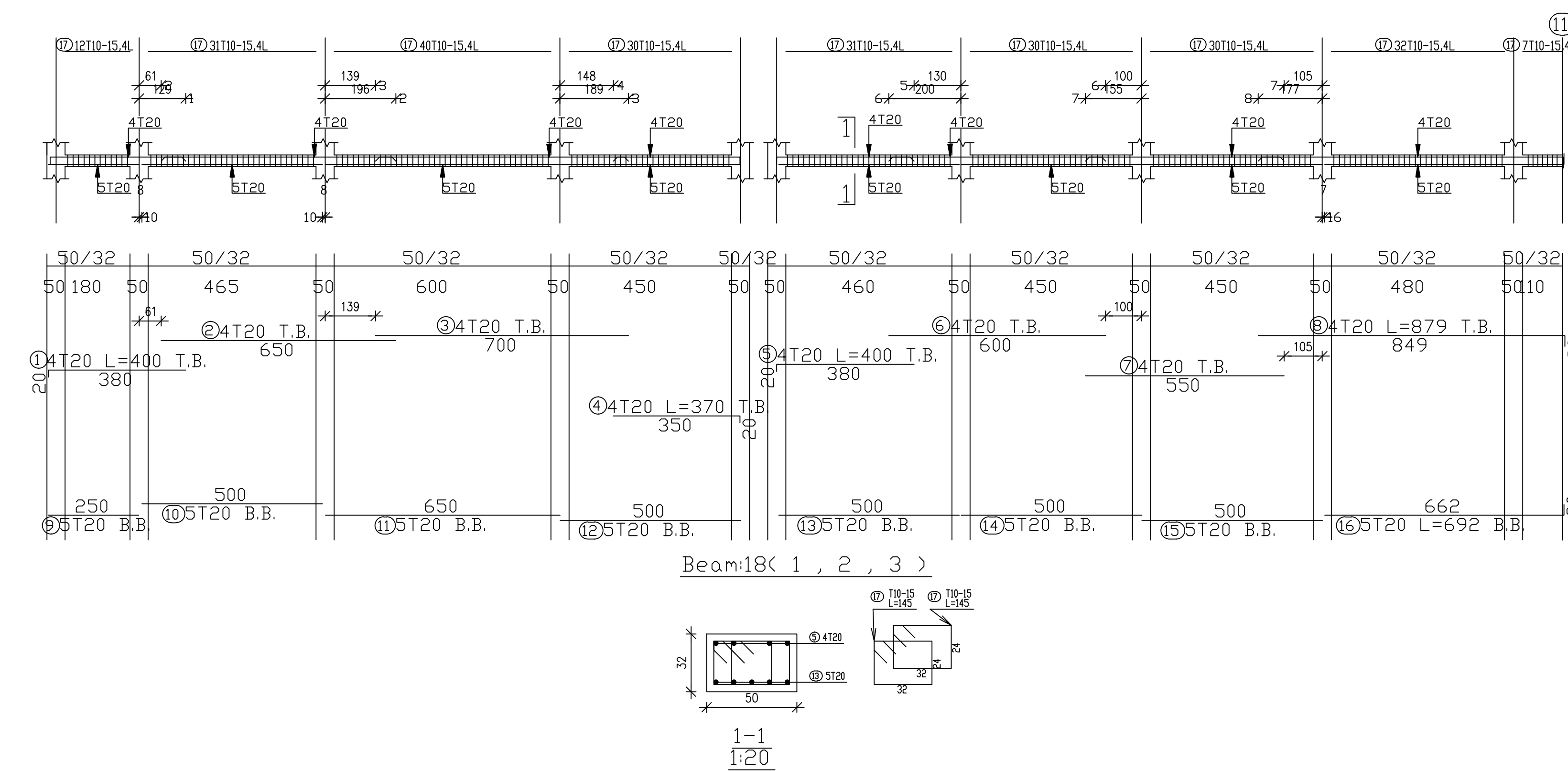
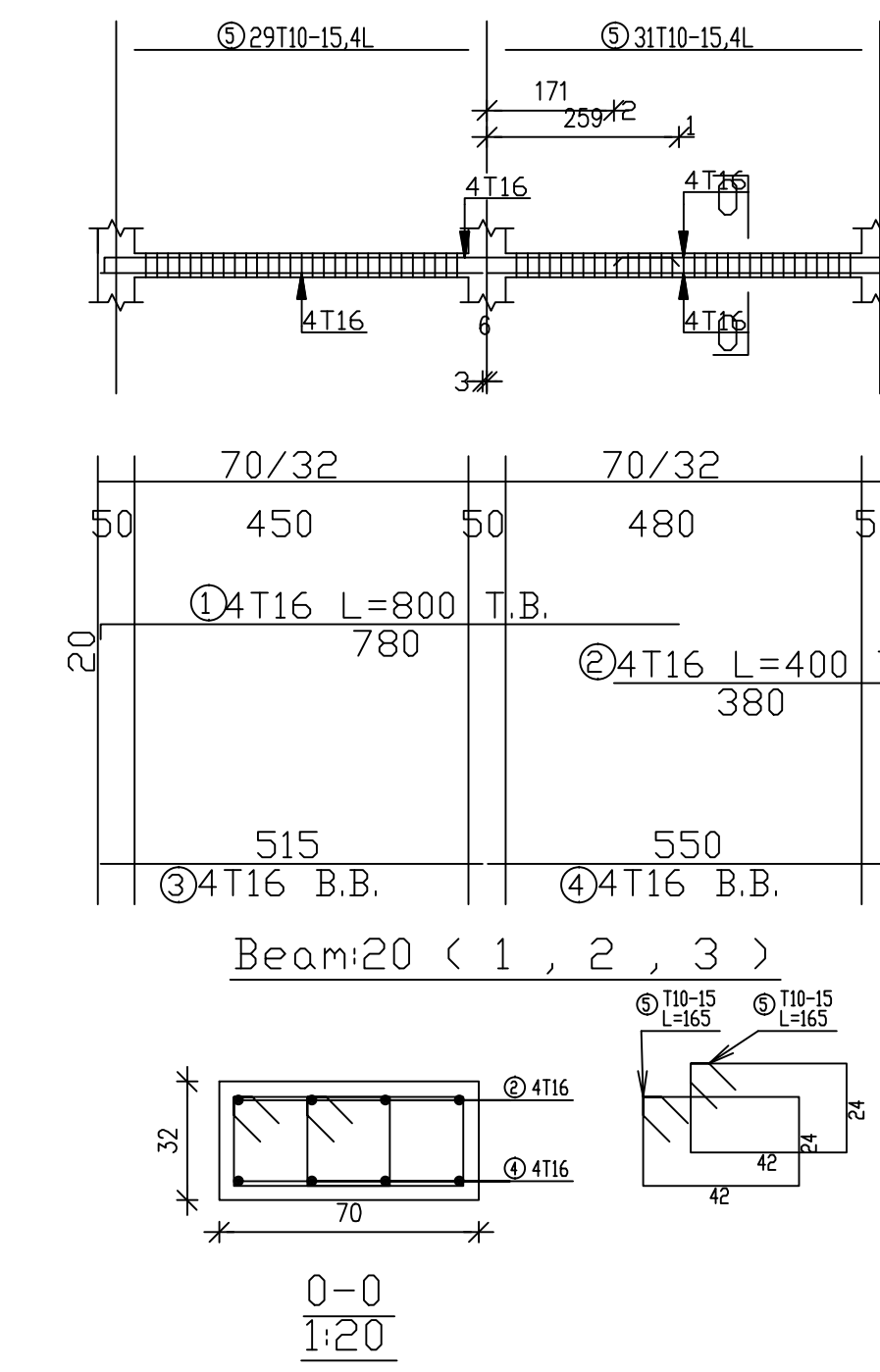
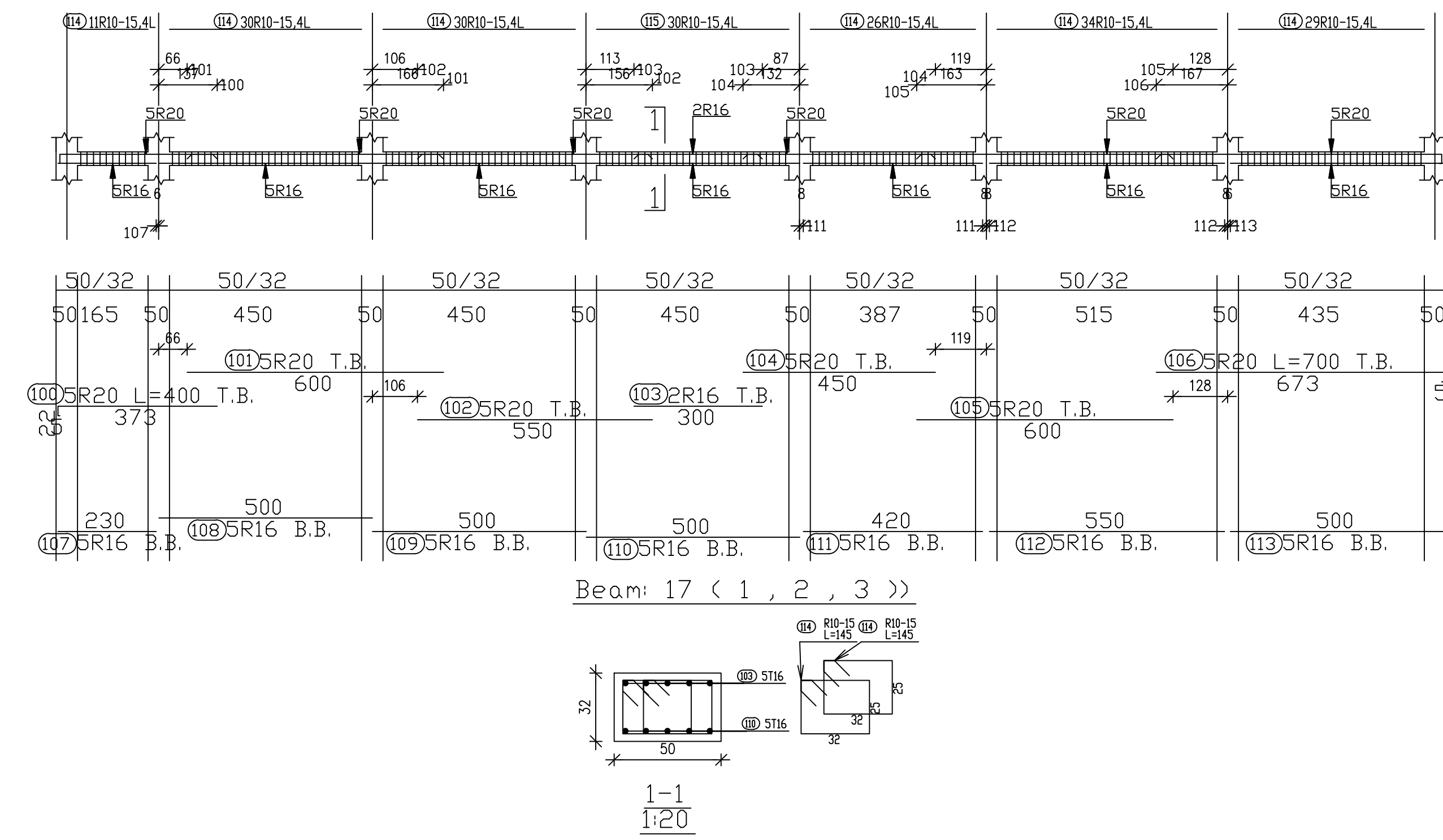
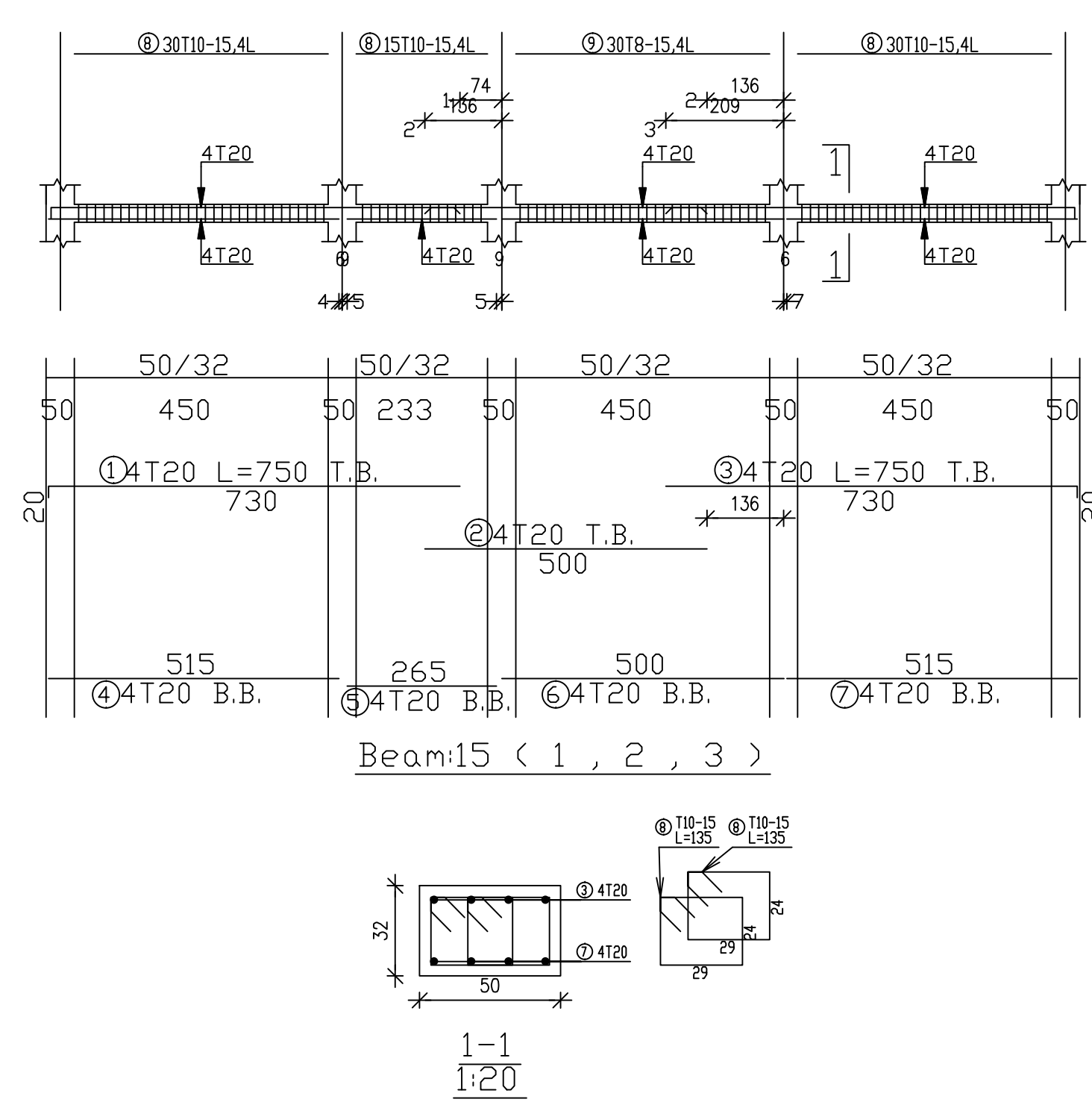
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE

1/200

No. of DRAW

543





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Polytechnic
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Civil & Architectural Dept.

Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :

Eng- shadi qumsiah

Designed by :

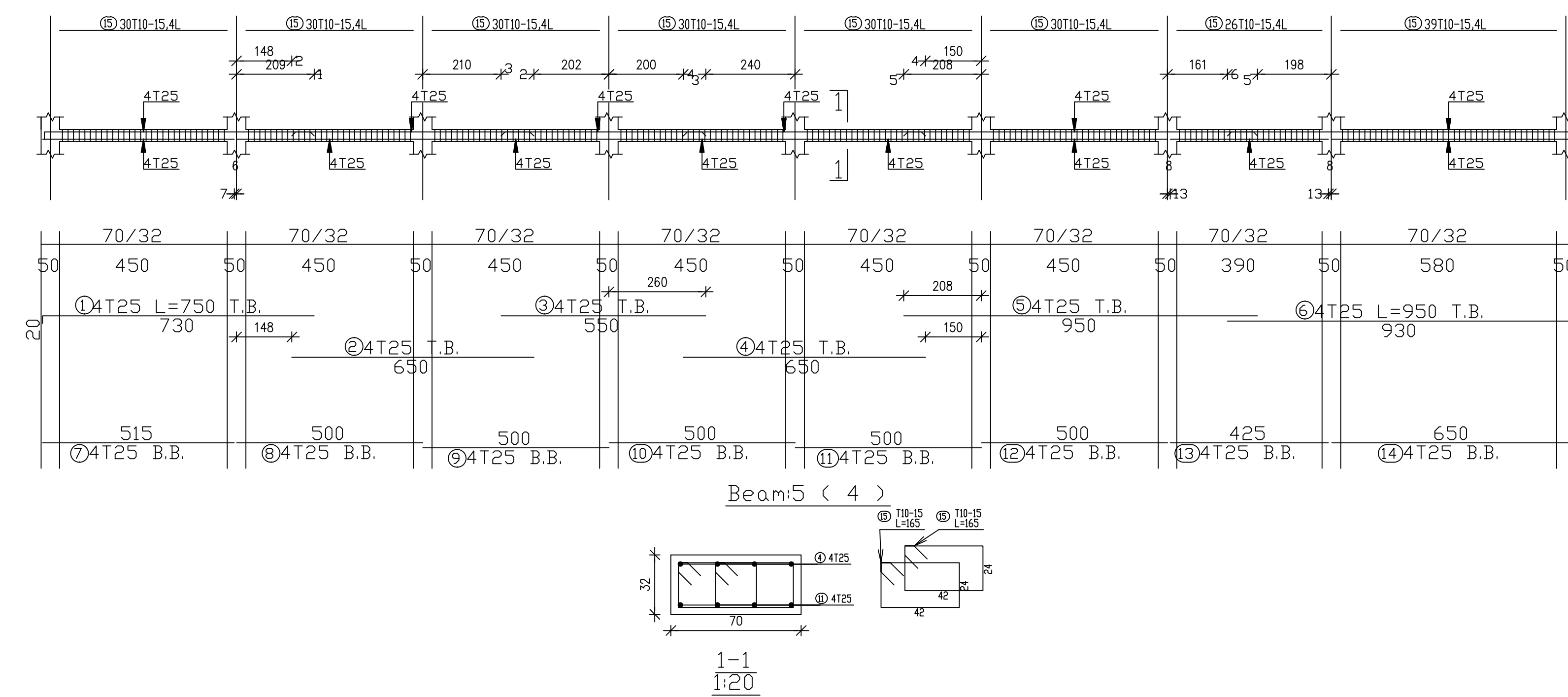
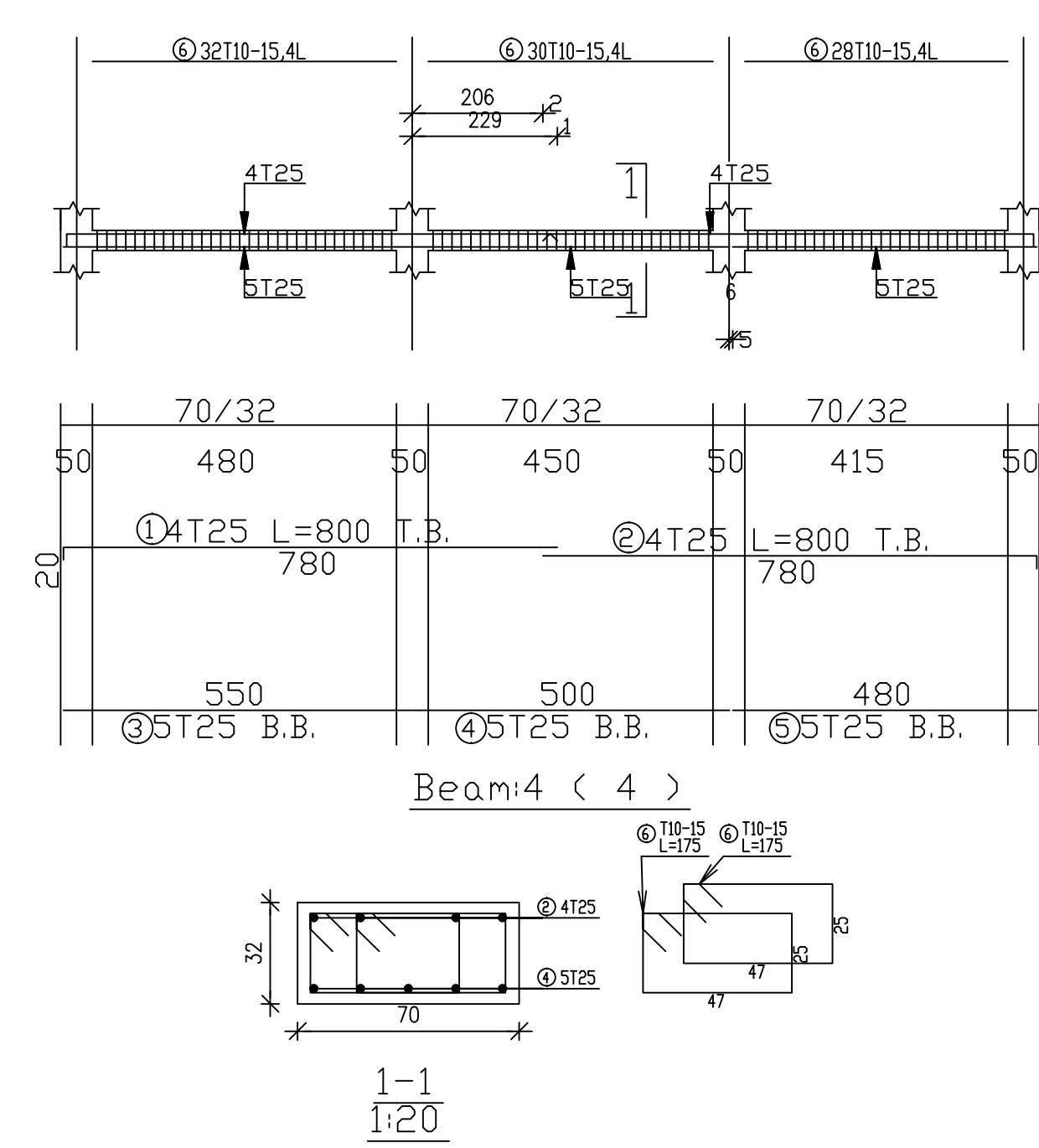
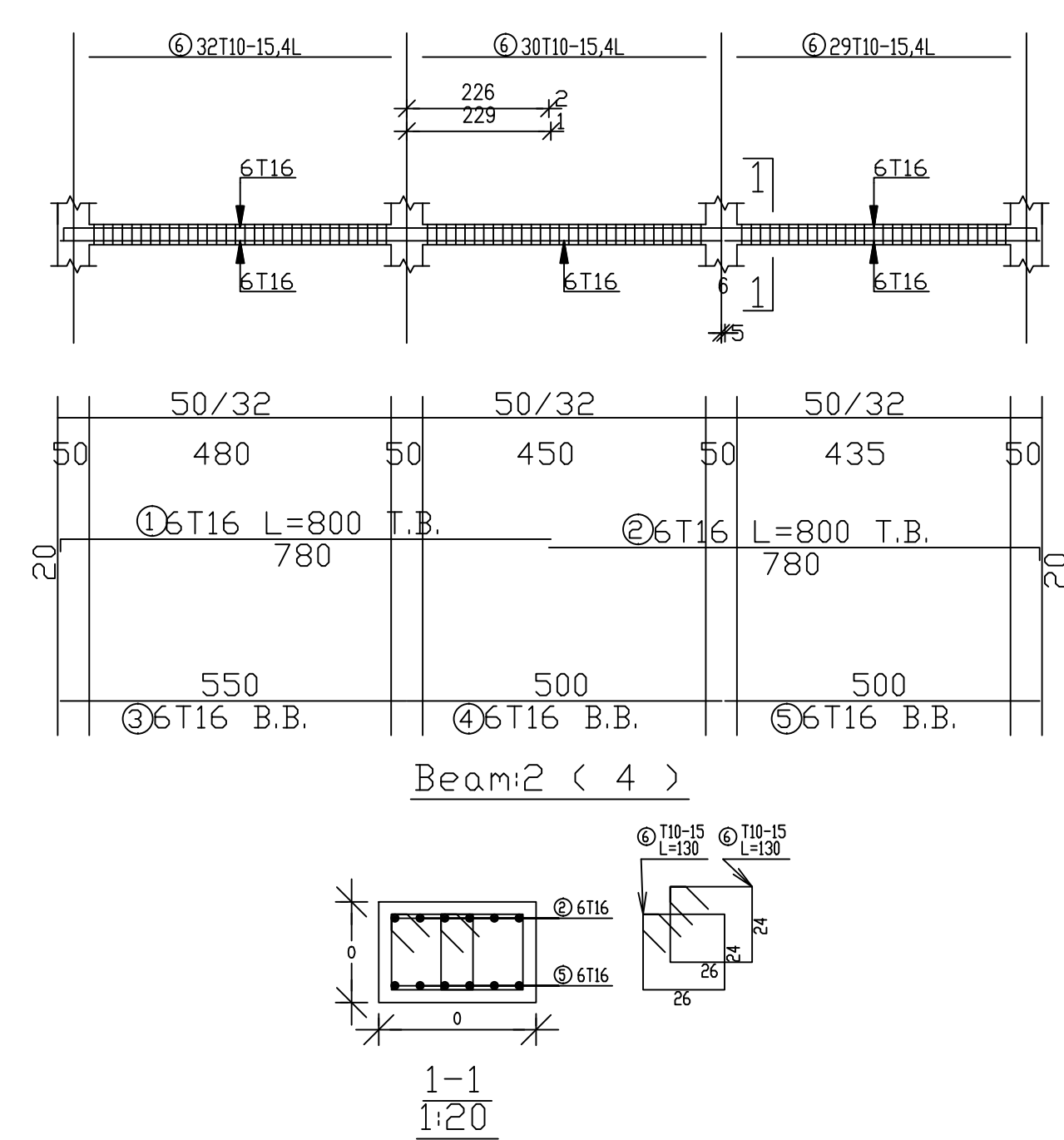
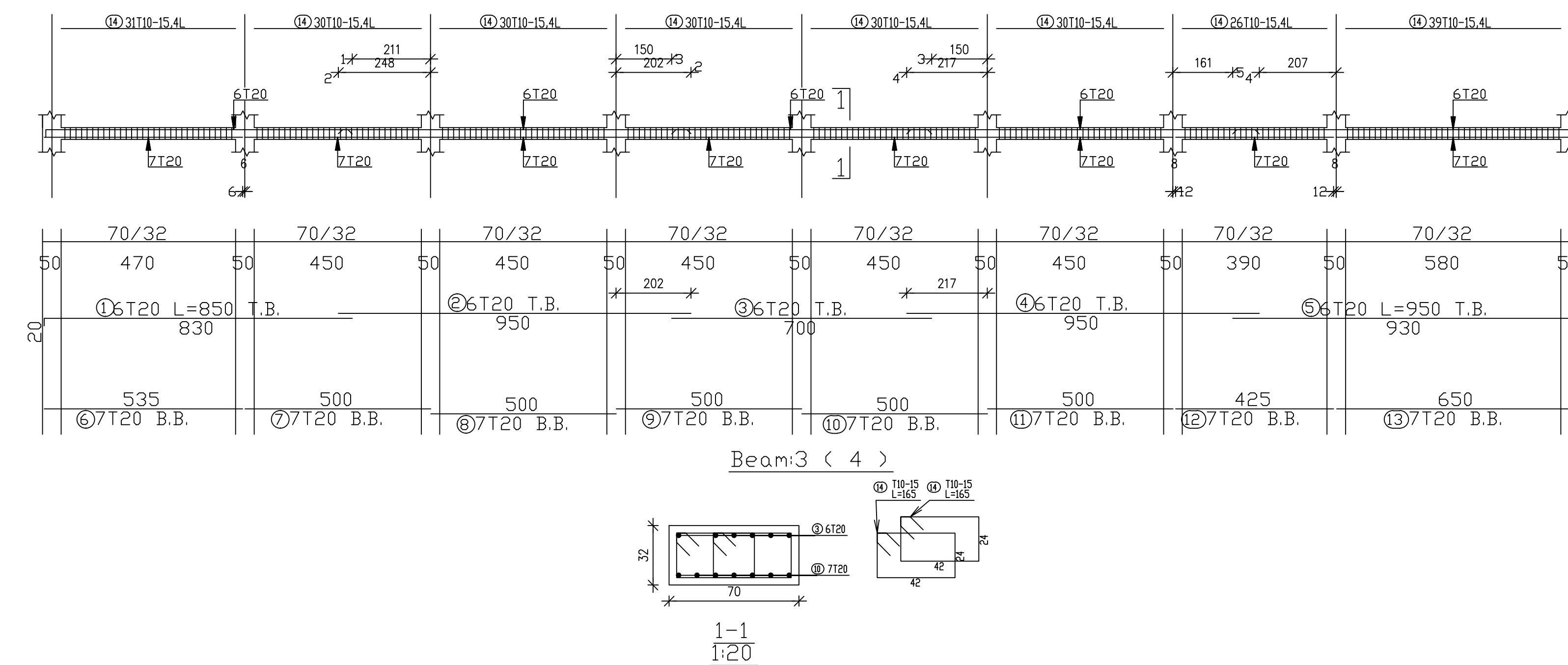
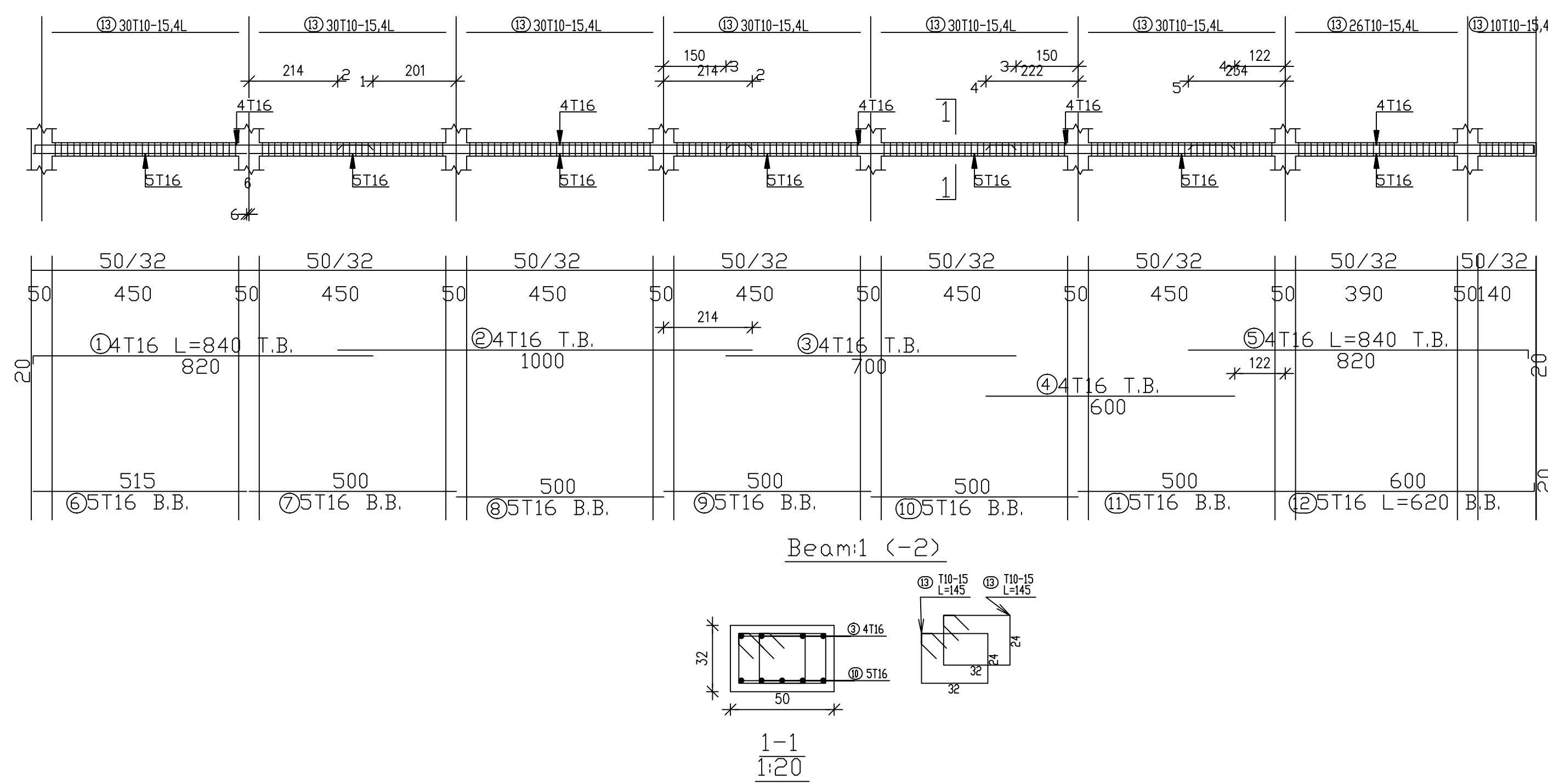
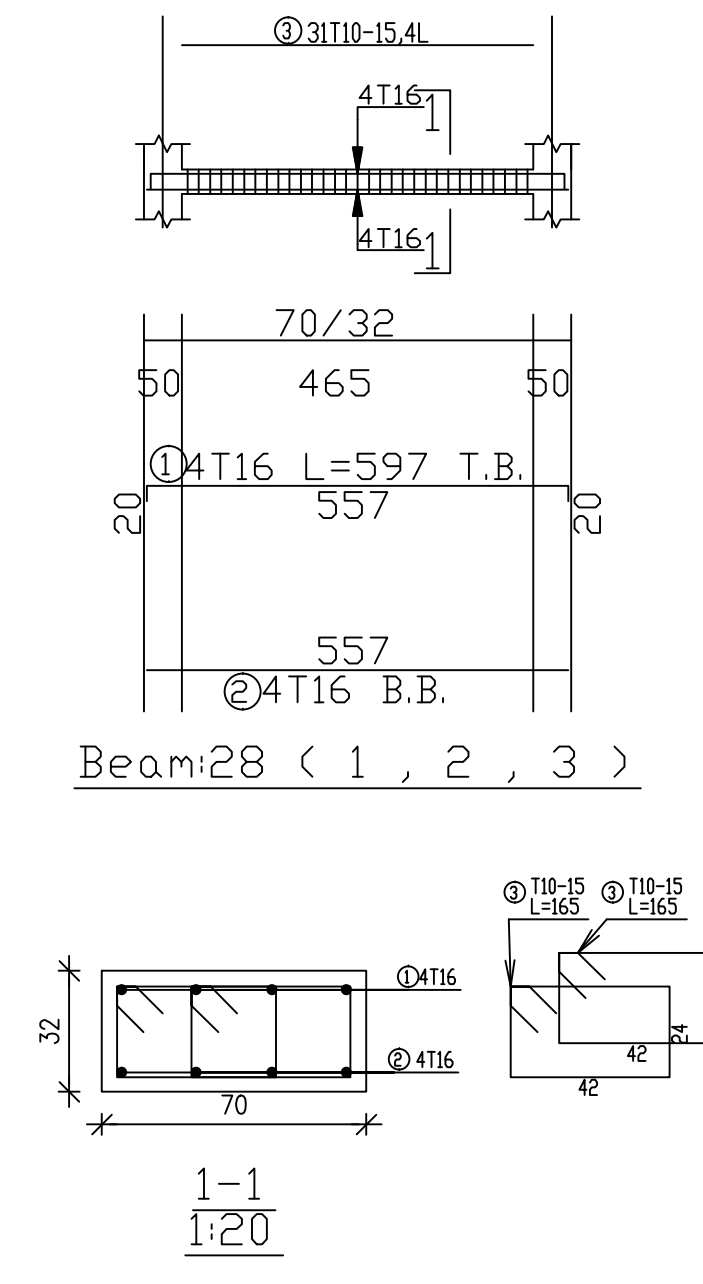
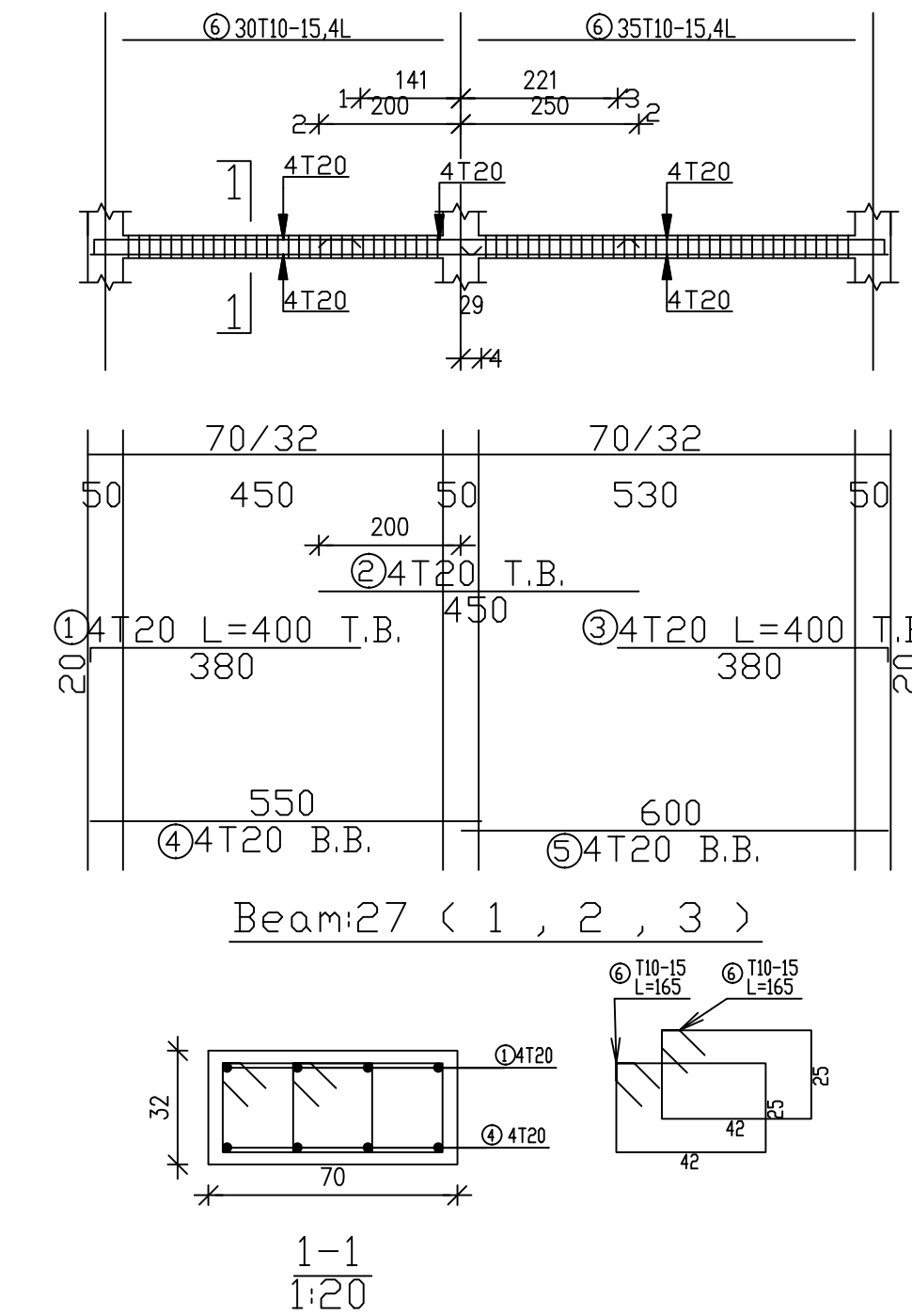
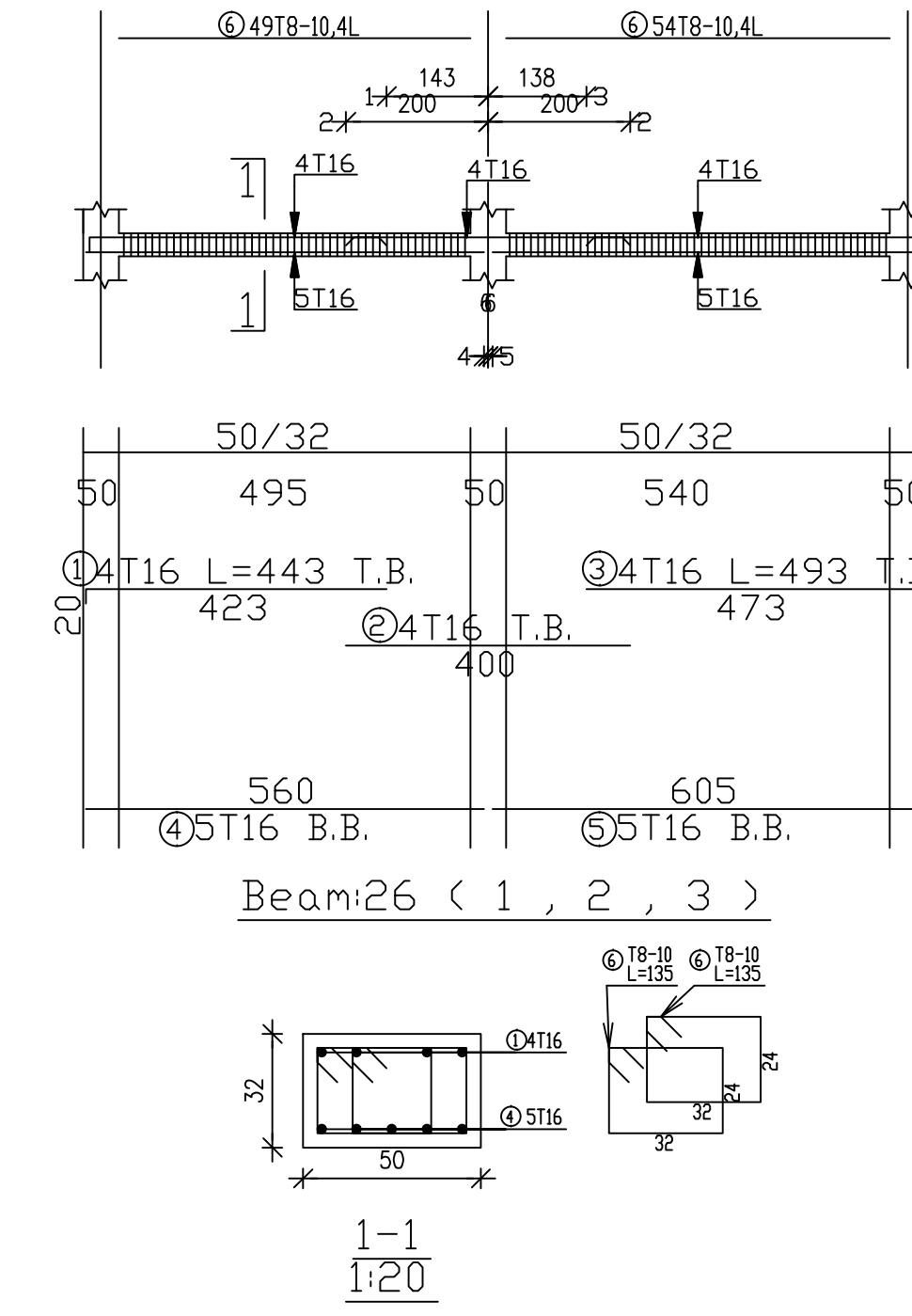
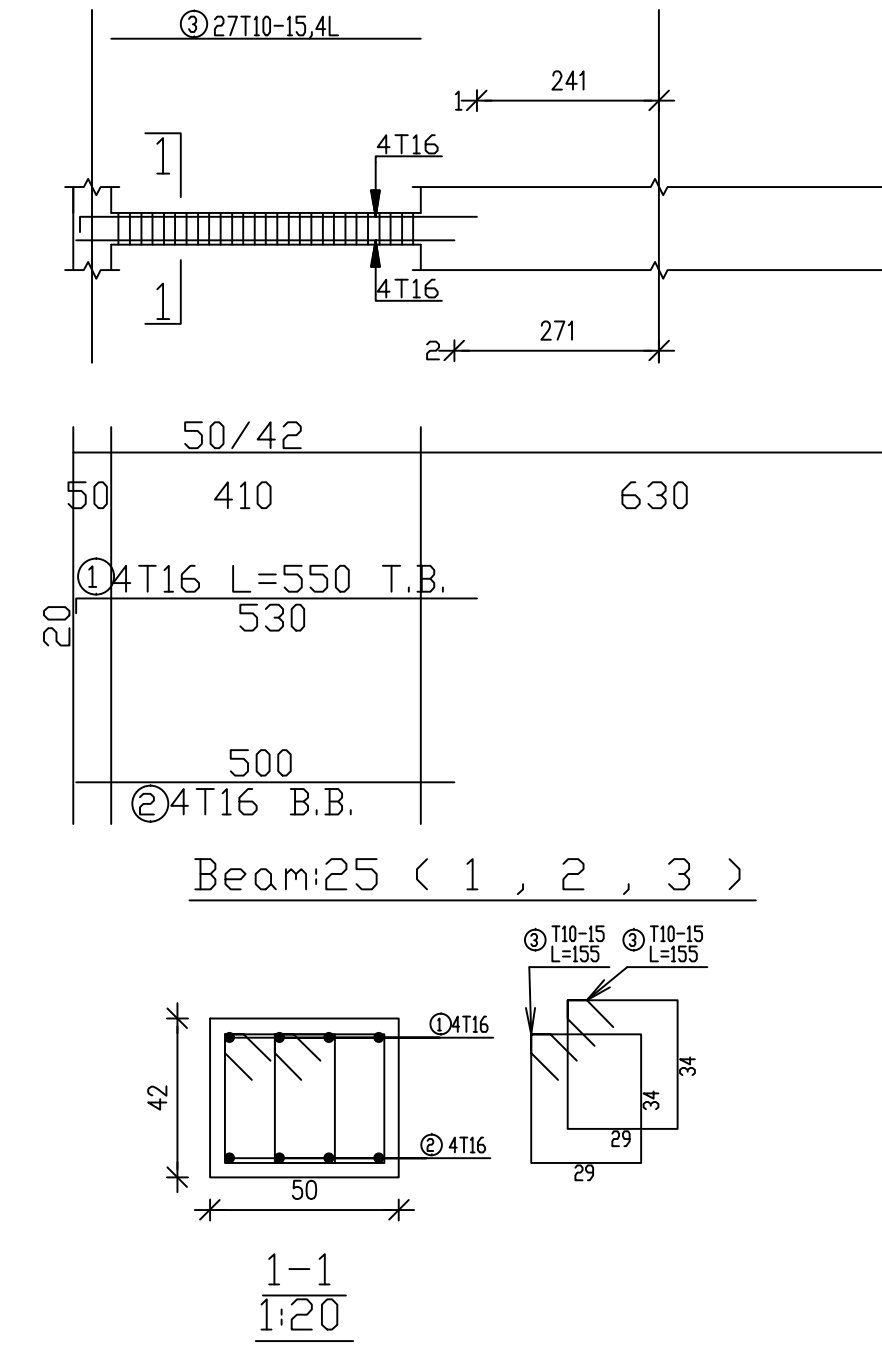
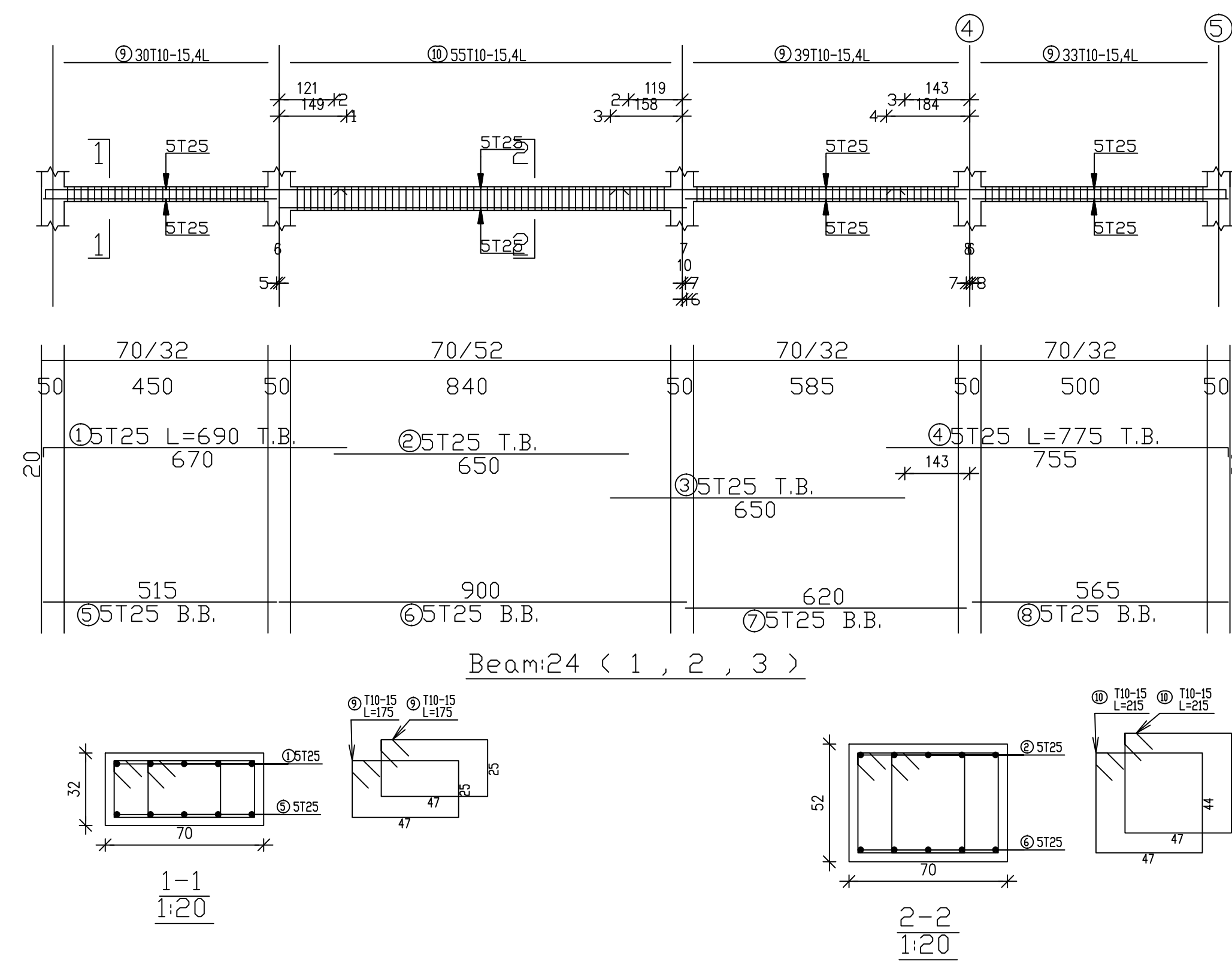
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE

1/200

No. of DRAW

544





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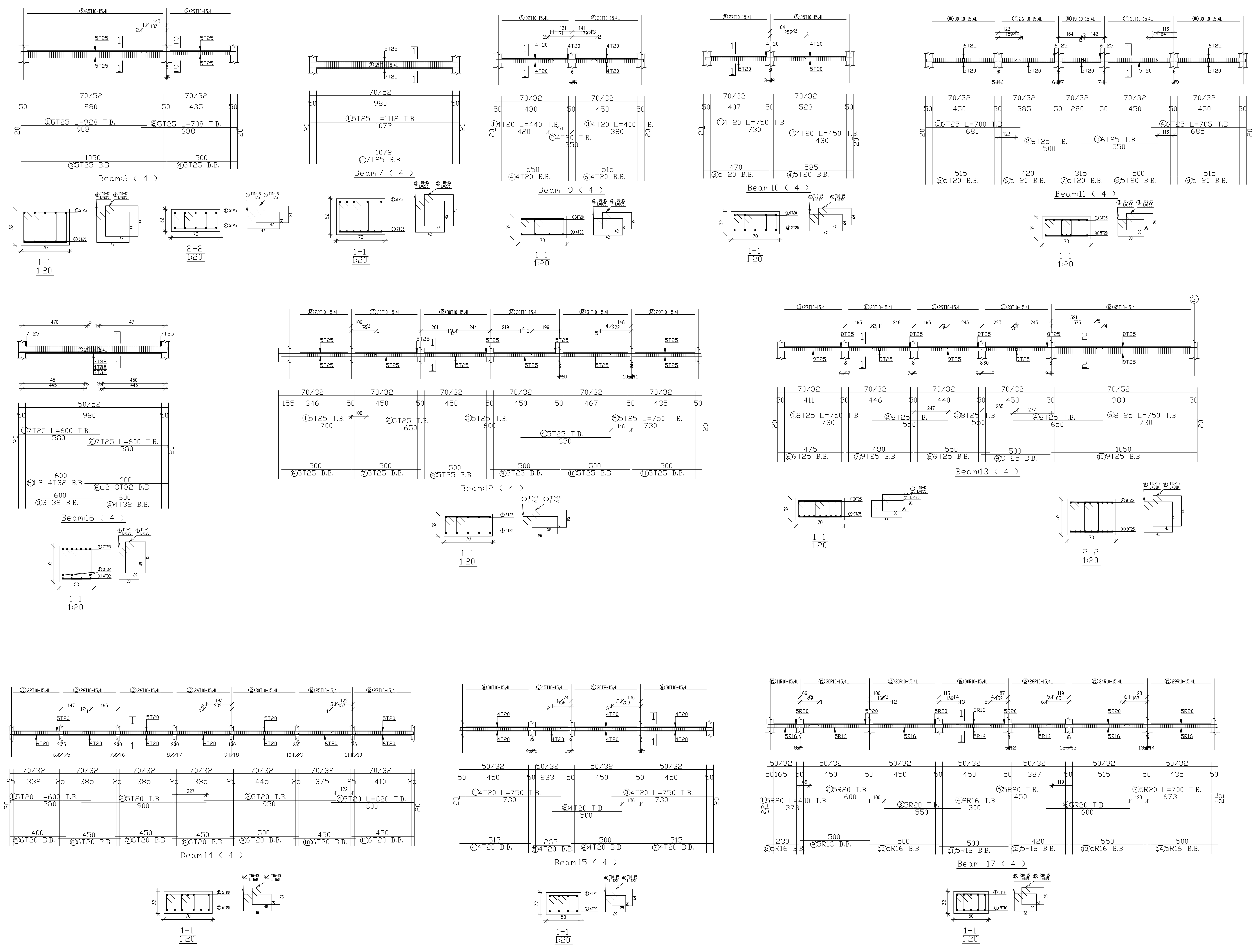
Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah
Designed by :
shatmaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	545





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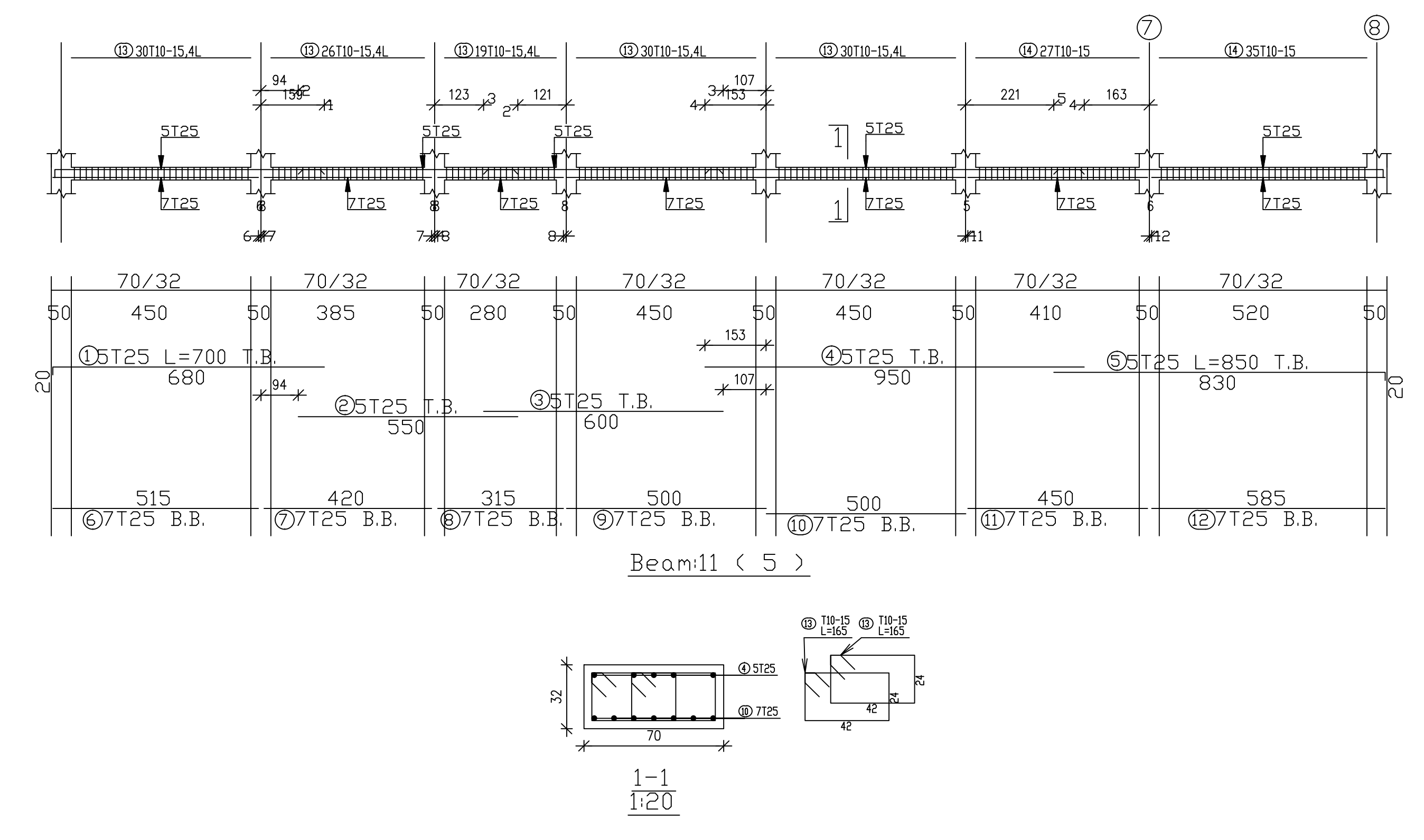
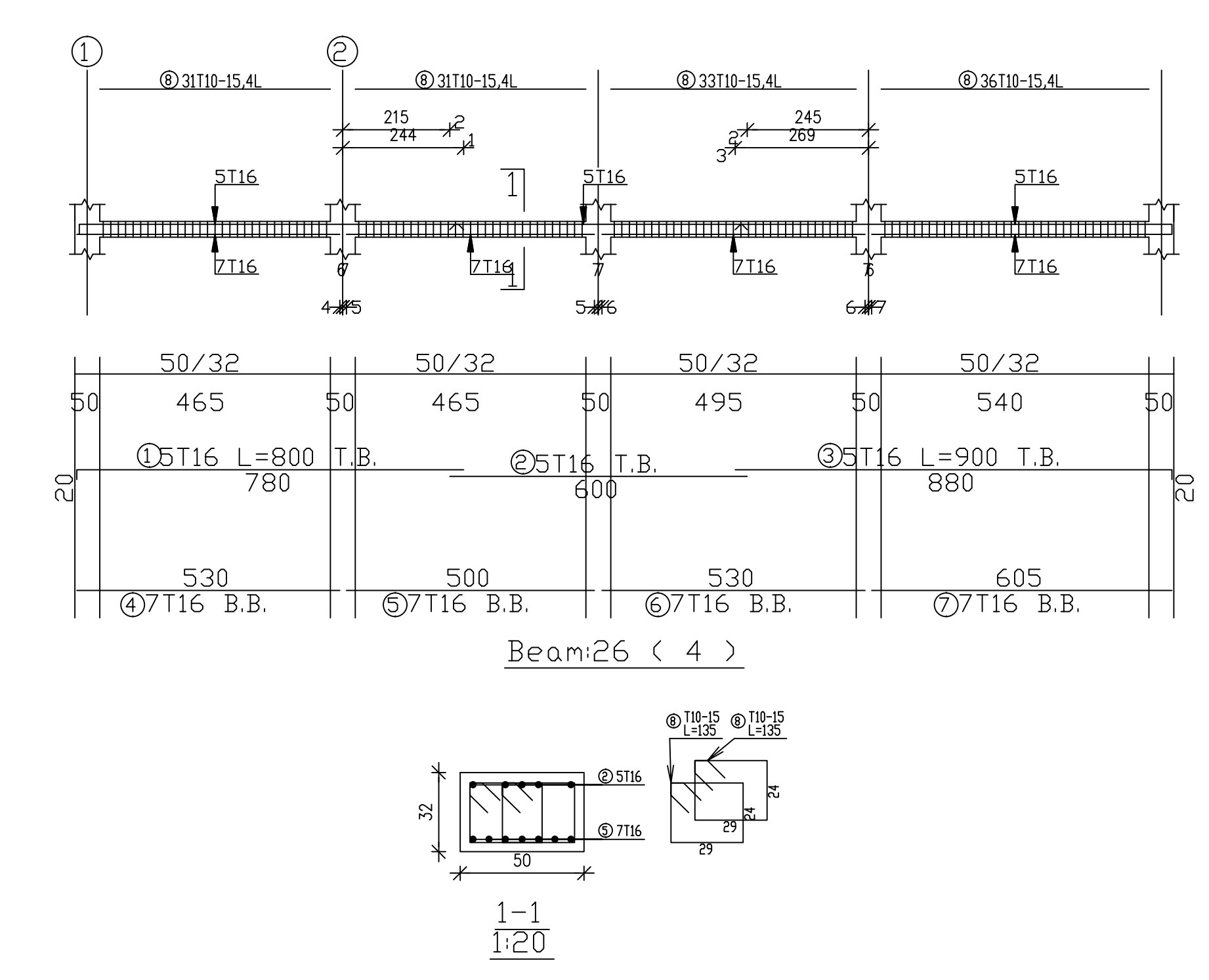
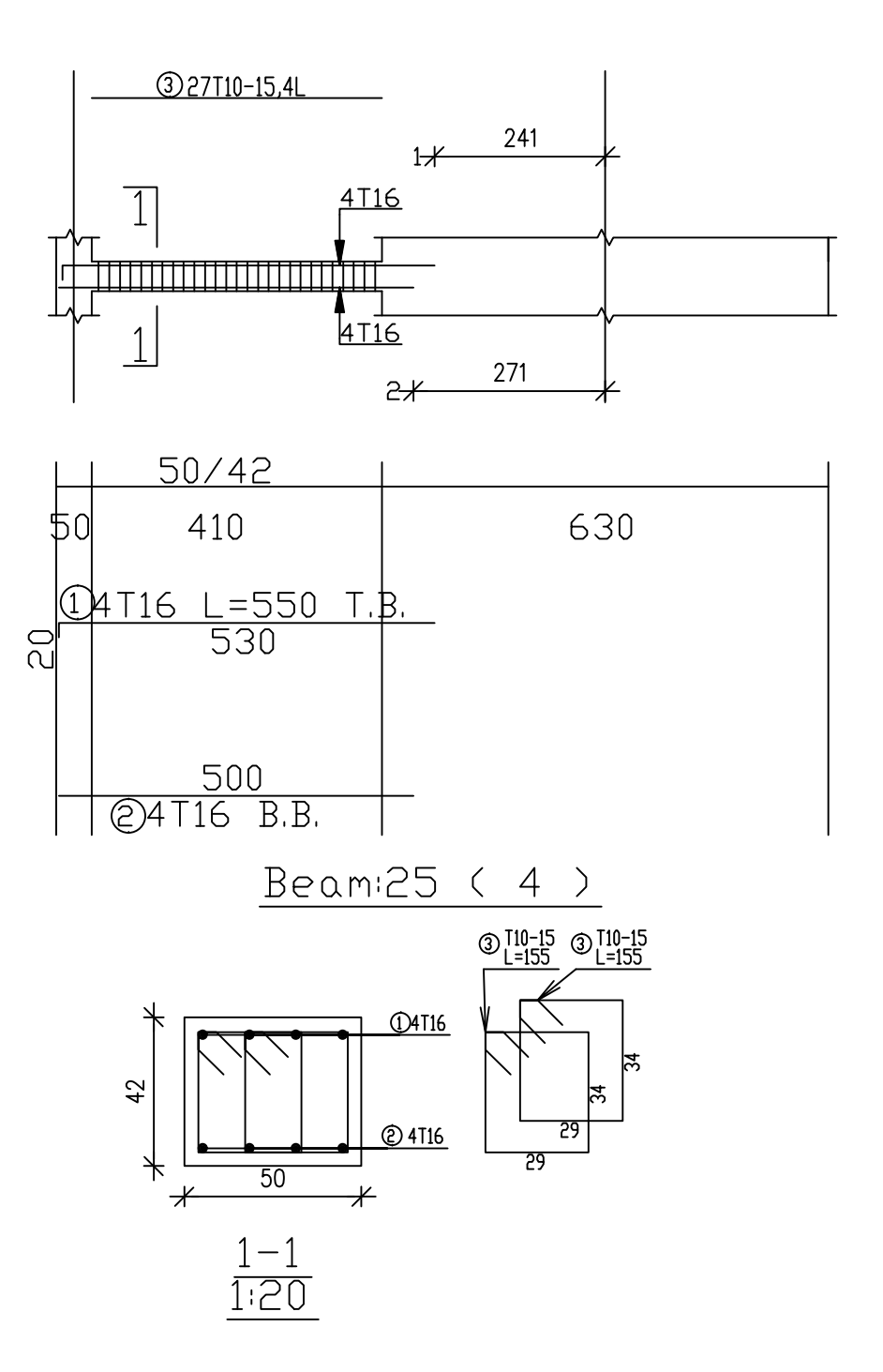
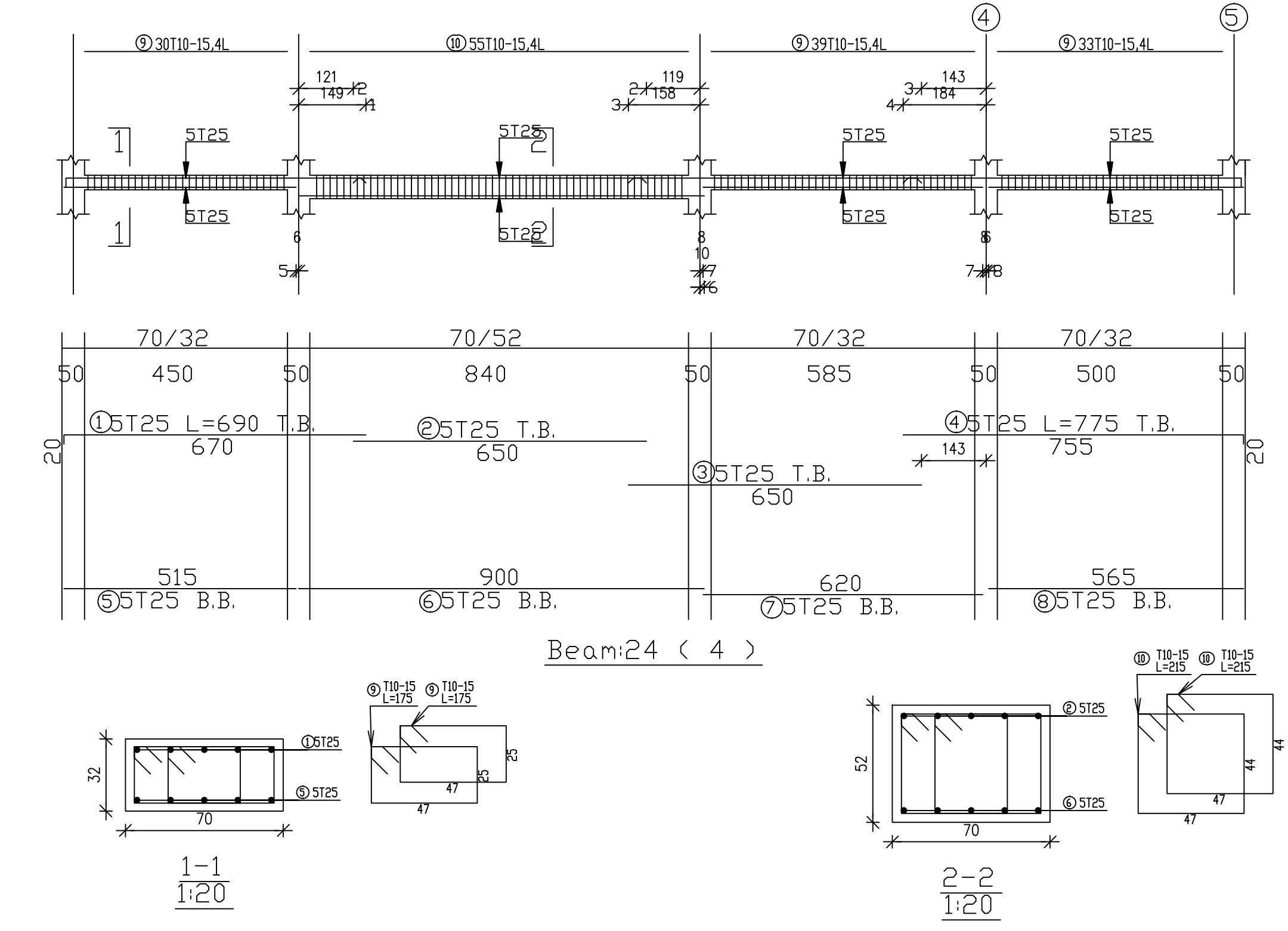
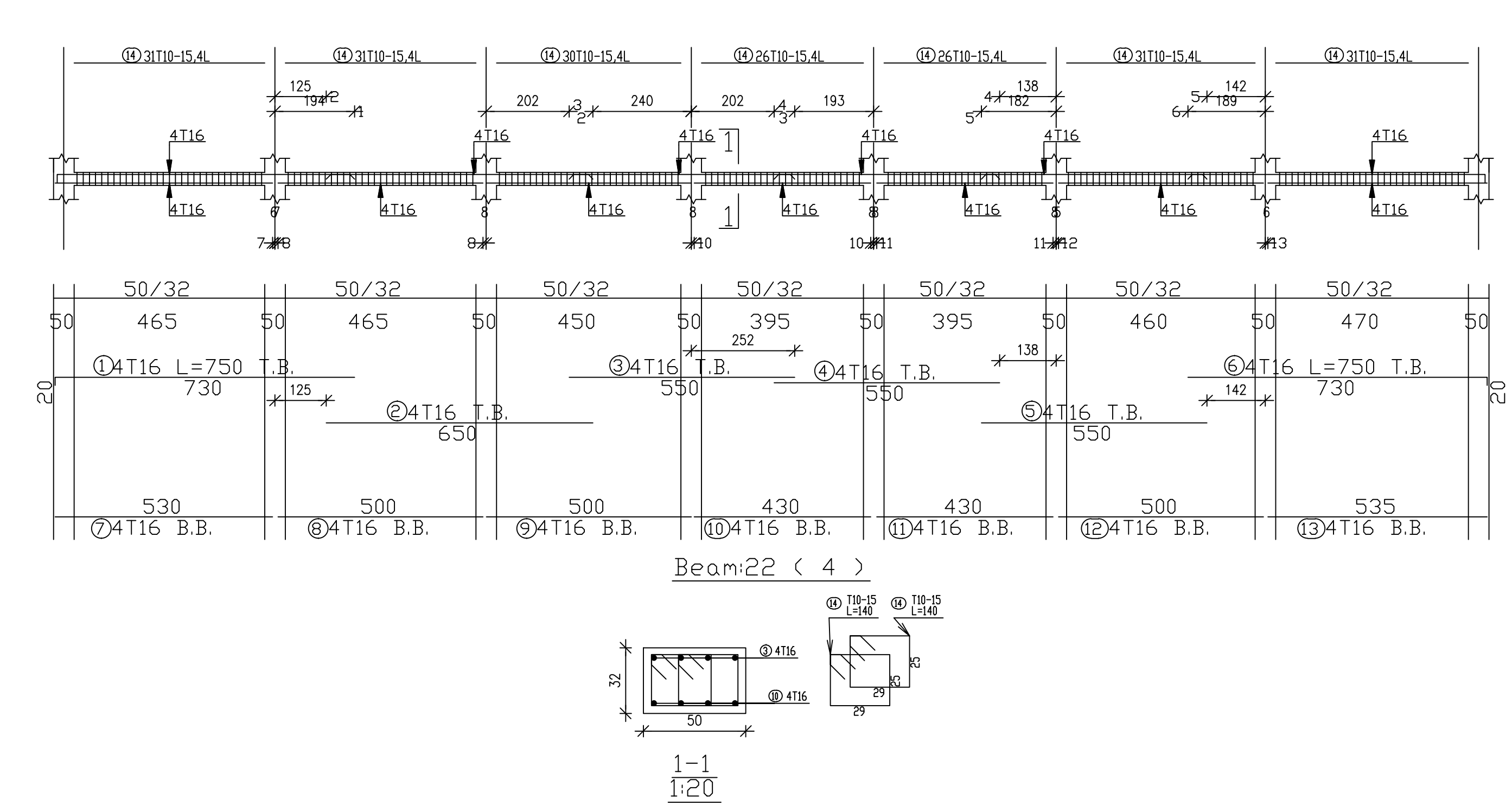
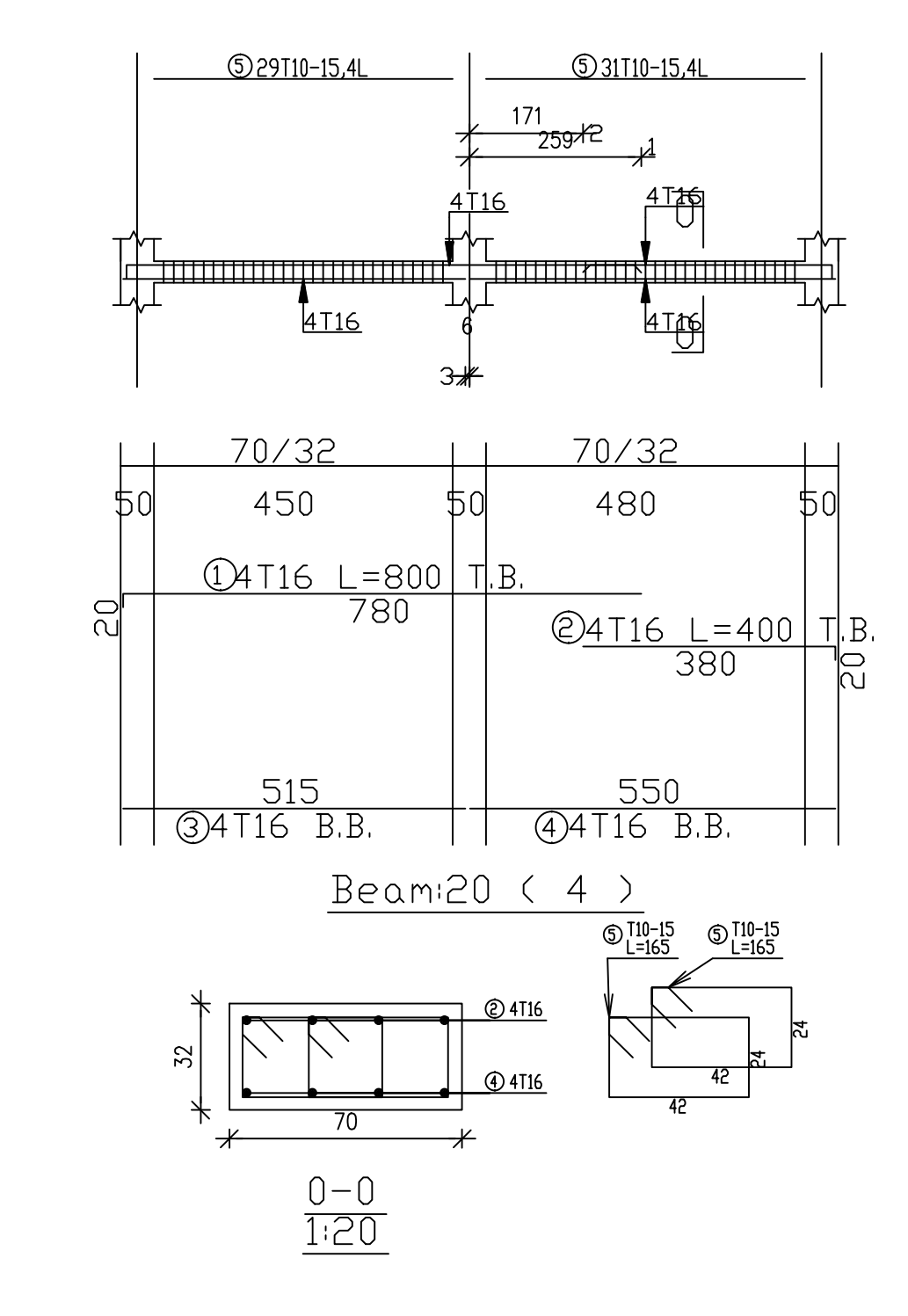
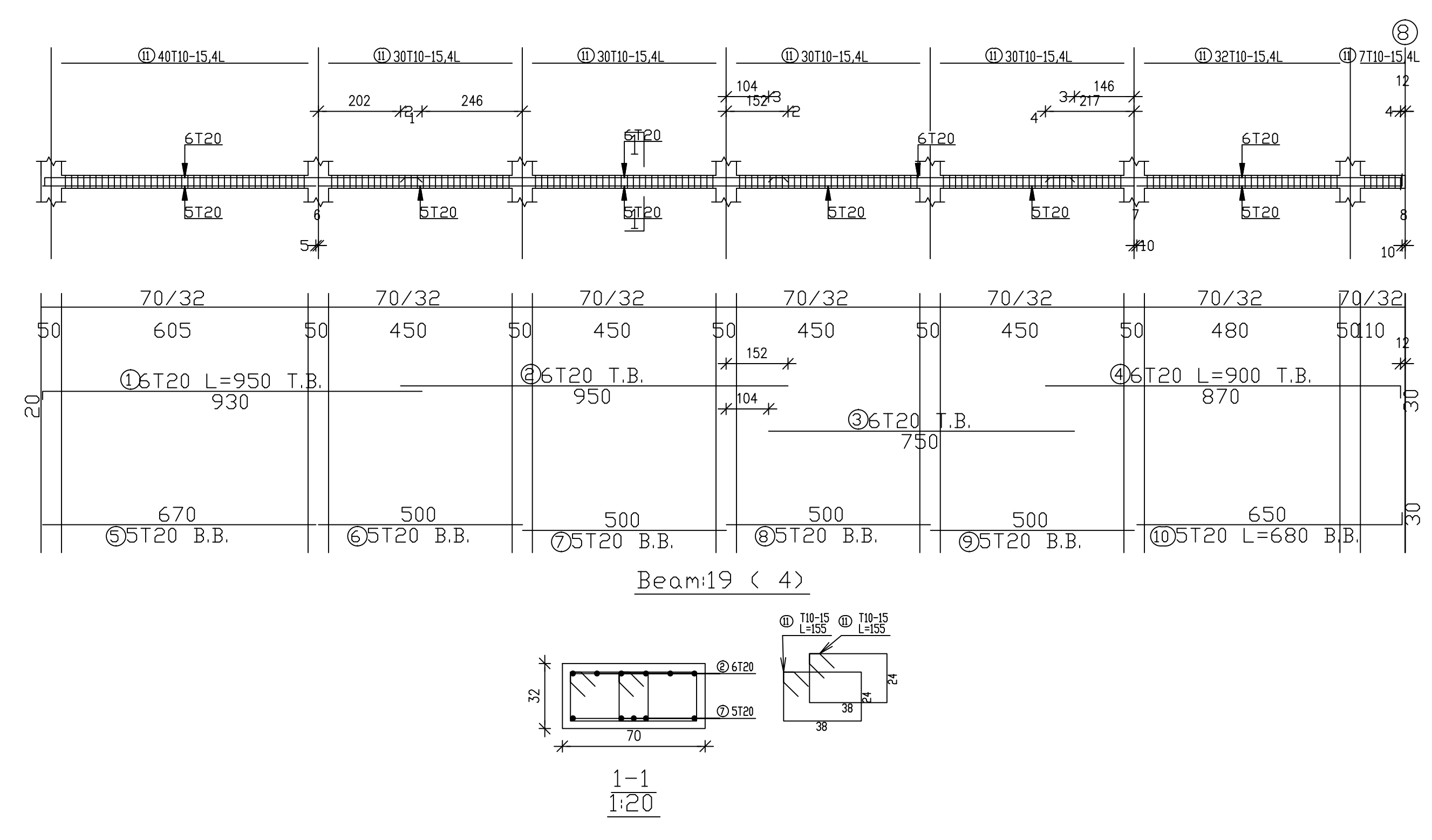
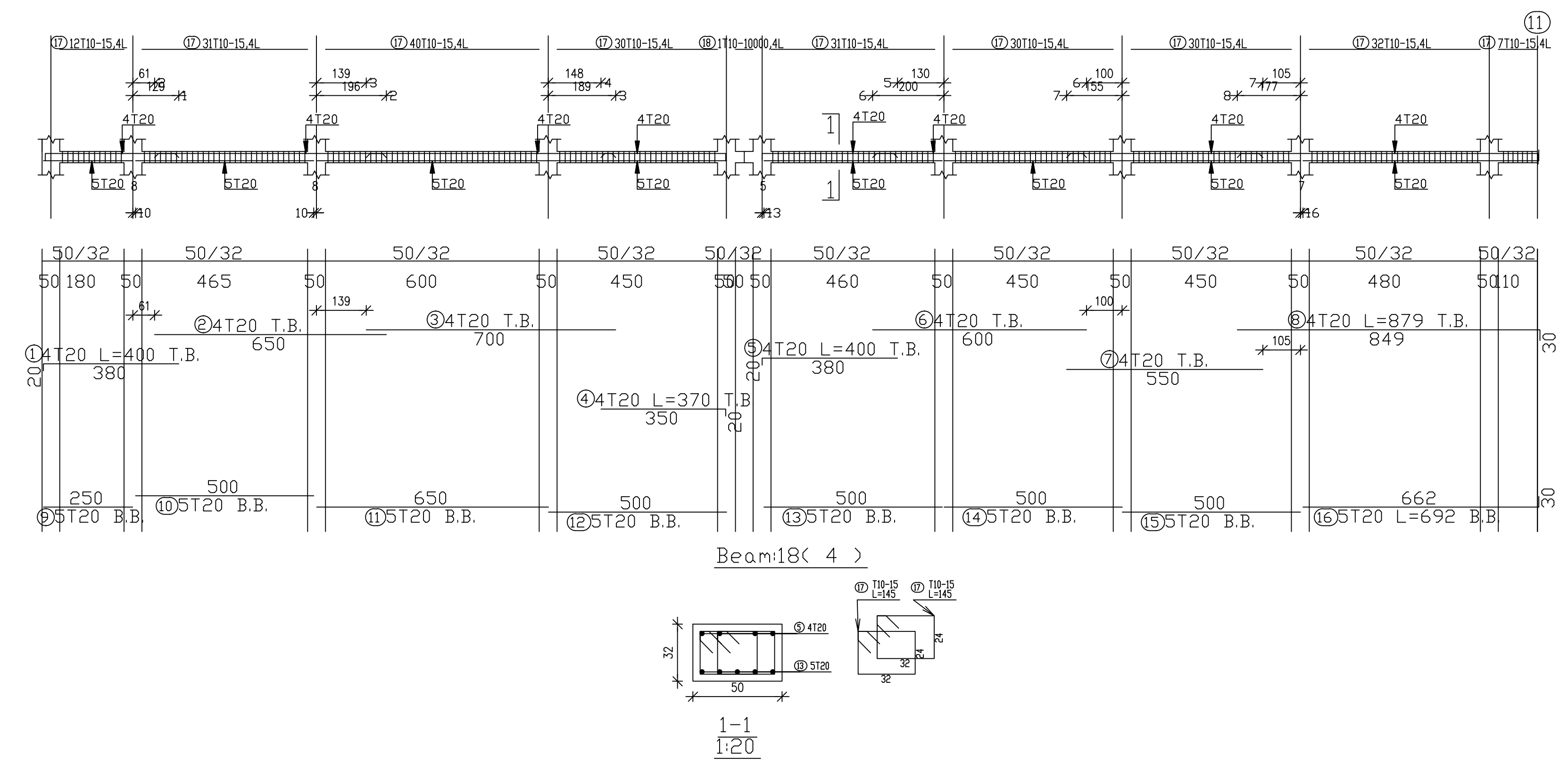
Graduation Project

Mall

DRAWING TITLE :
BEAMS DETAILS

Supervisor :
Eng- shadi qumsiah
Designed by :
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE	No. of DRAW
1/200	546





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DRAWING TITLE :
BEAMS DETAILS

Supervisor :

Eng- shadi qumsiah

Designed by :

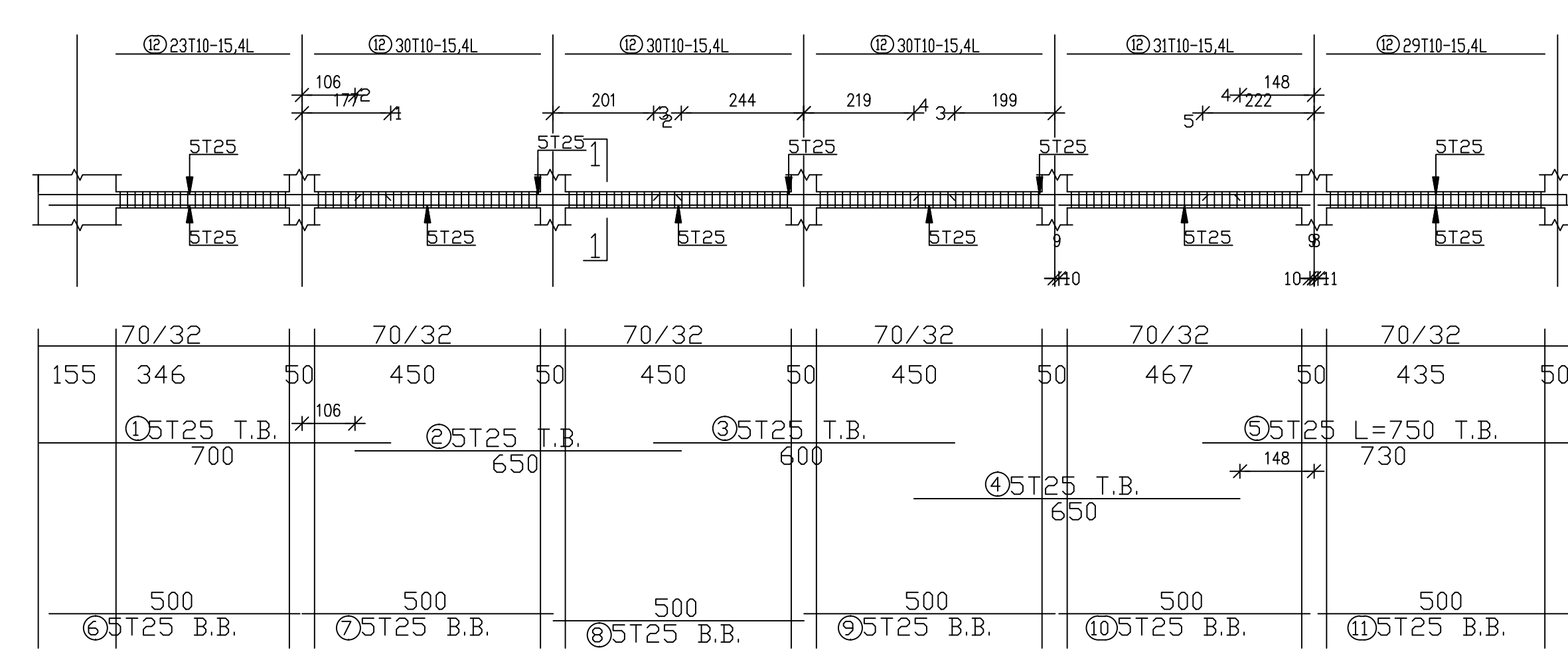
shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

SCALE

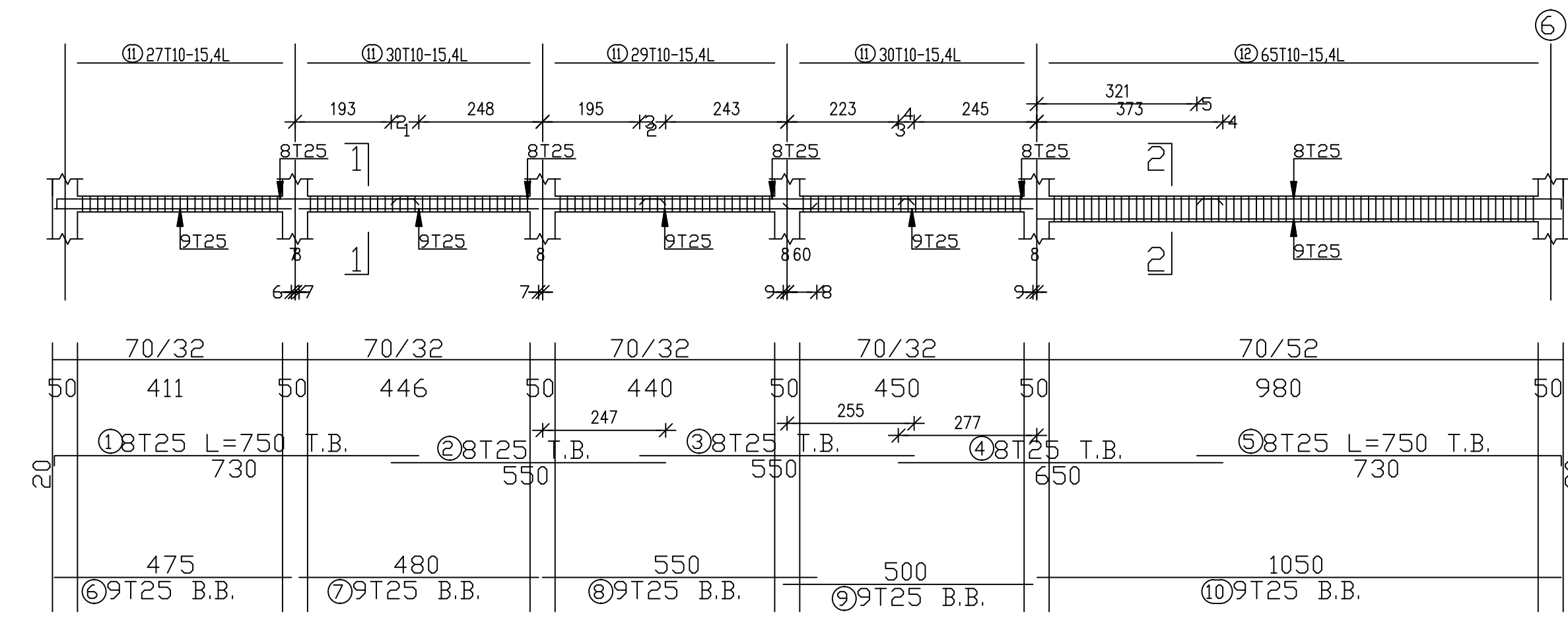
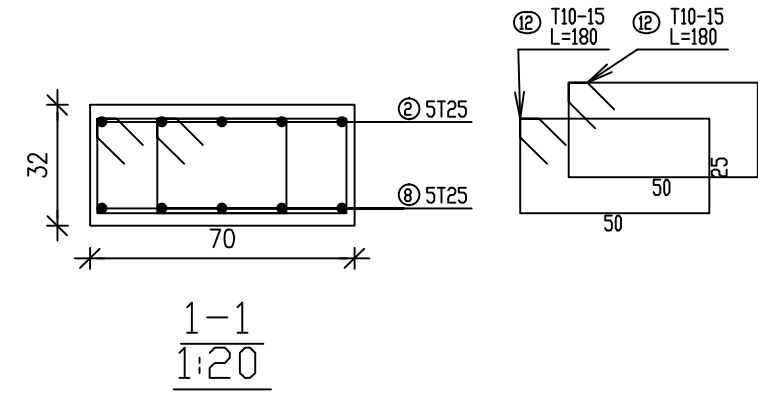
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No. of DRAW

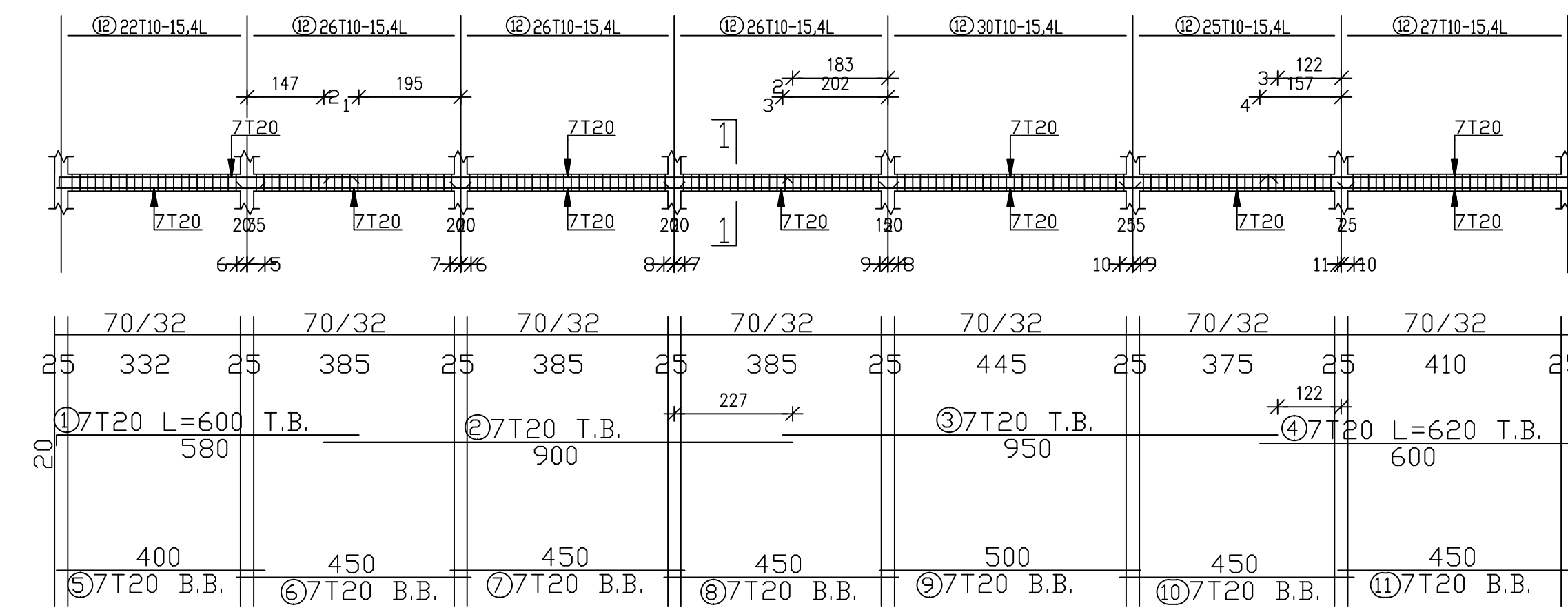
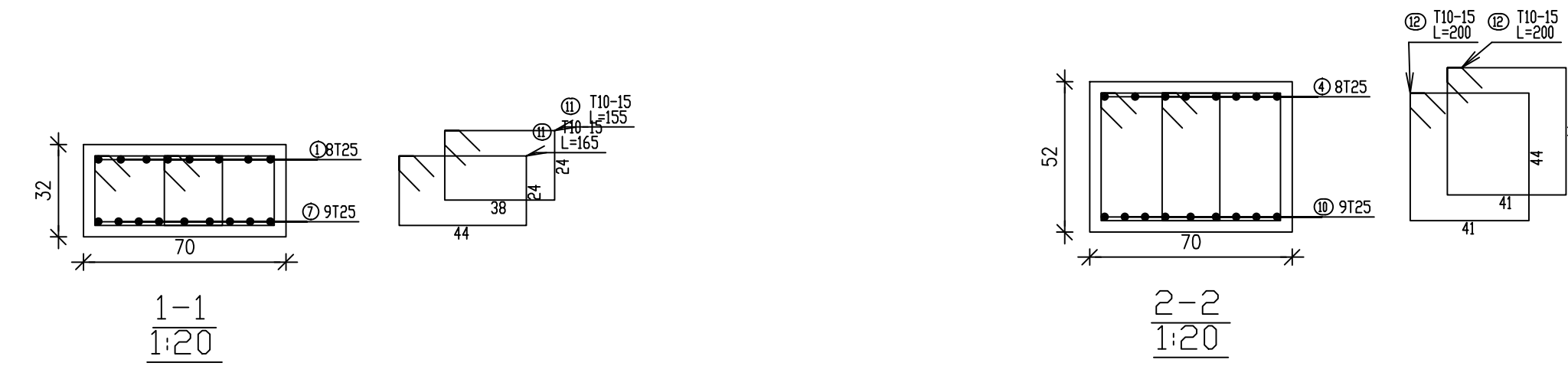
547



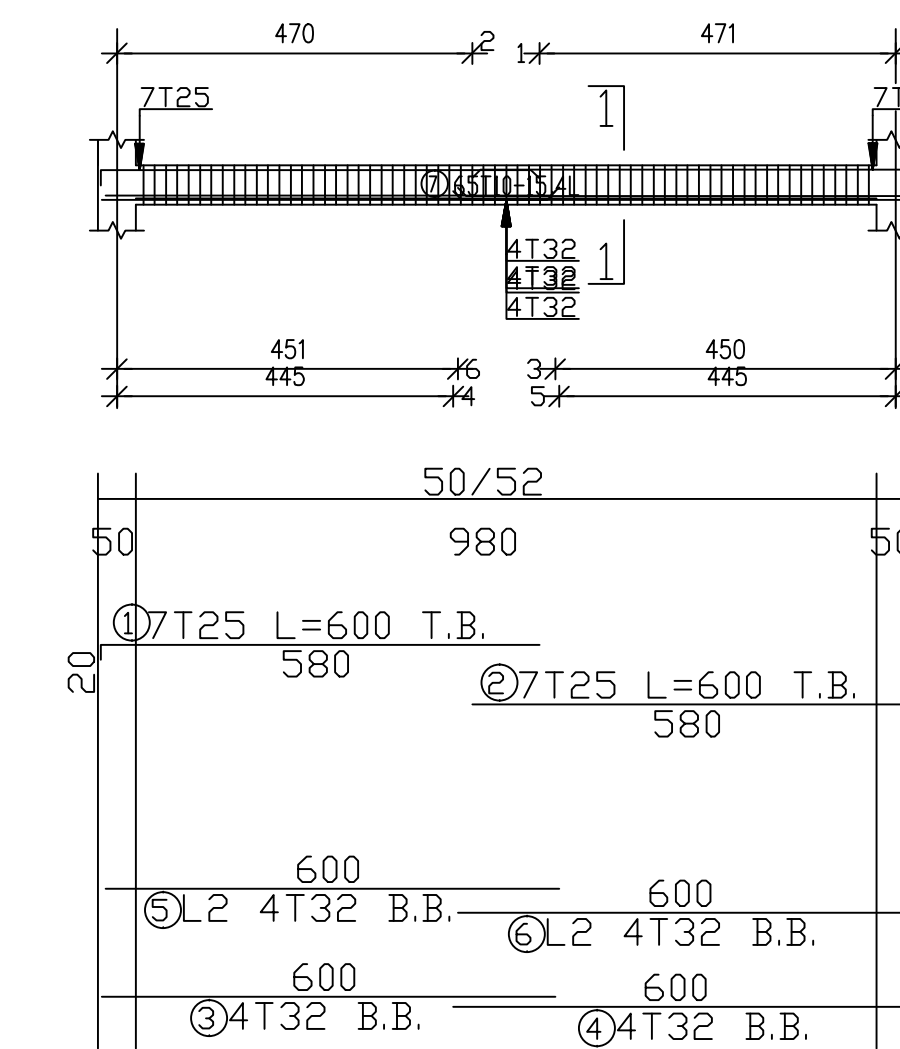
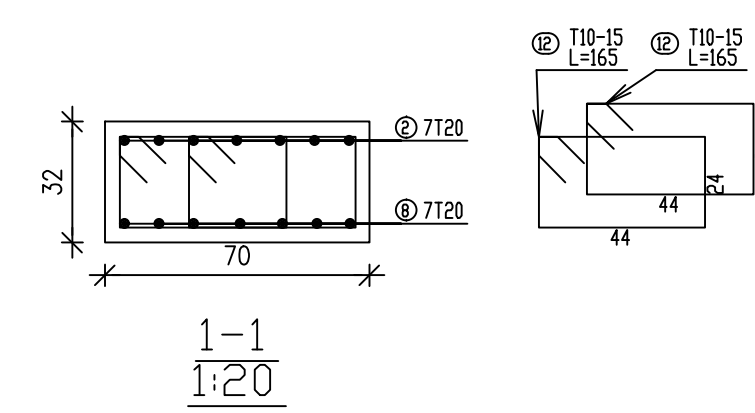
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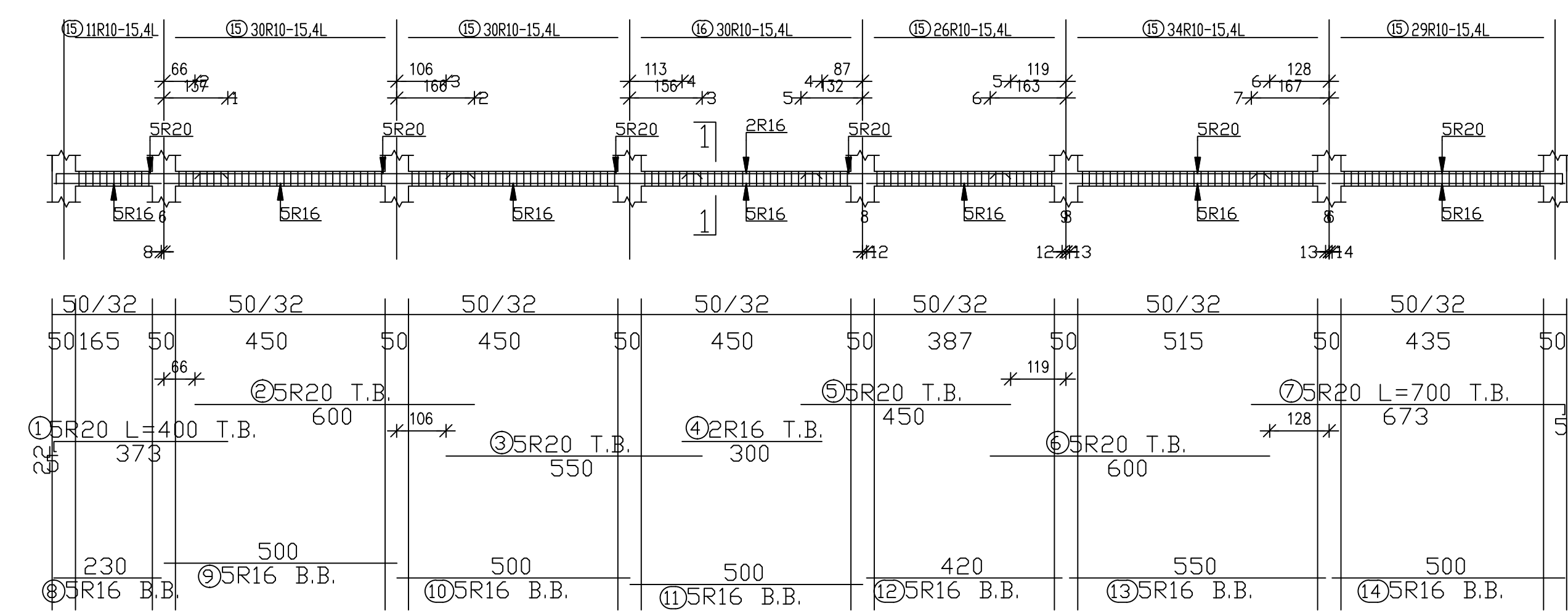
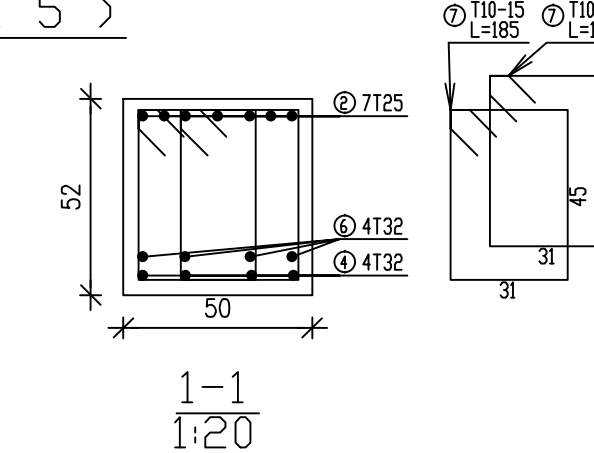
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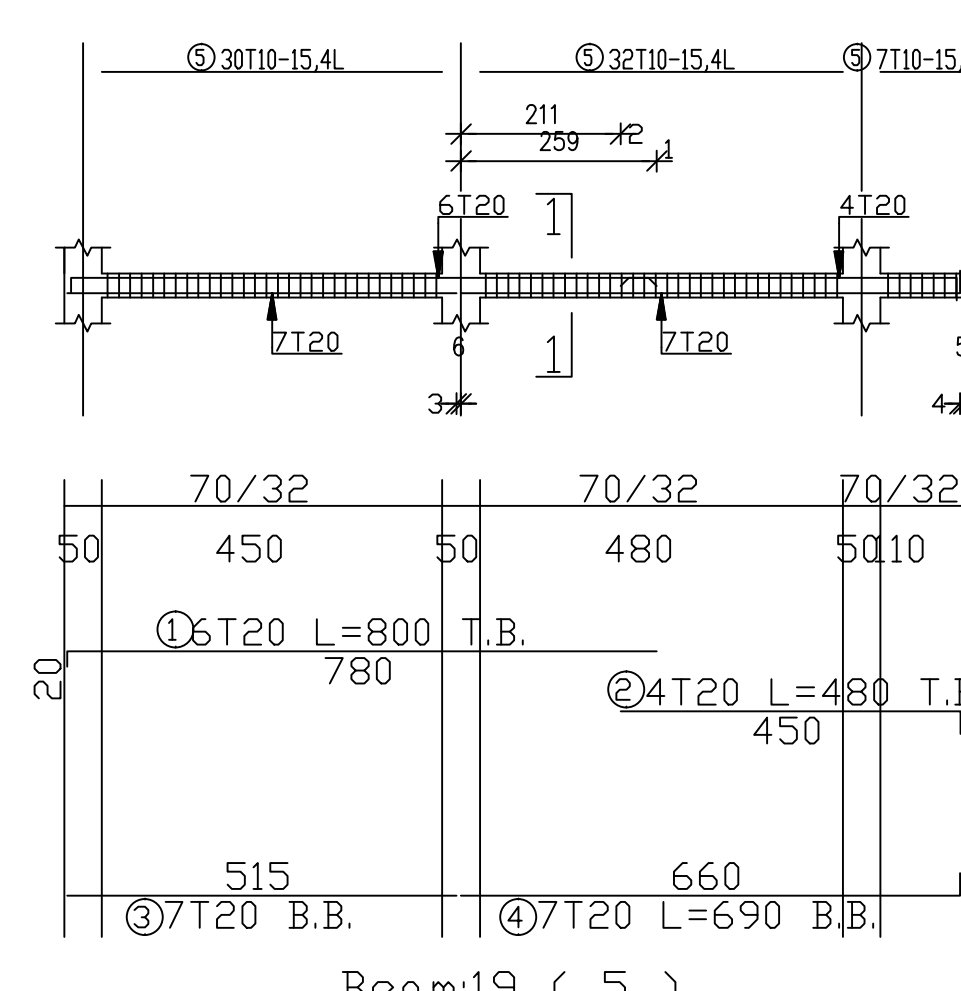
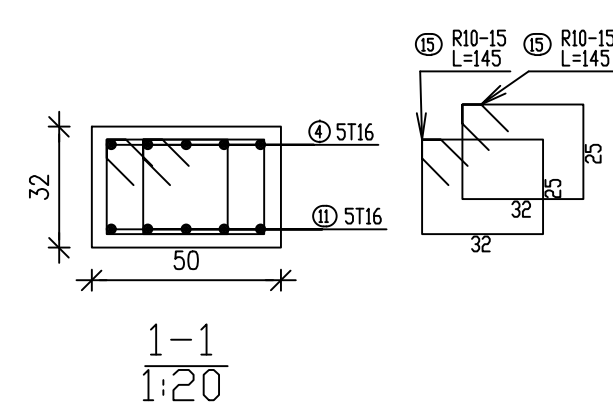
Beam:14 (5)



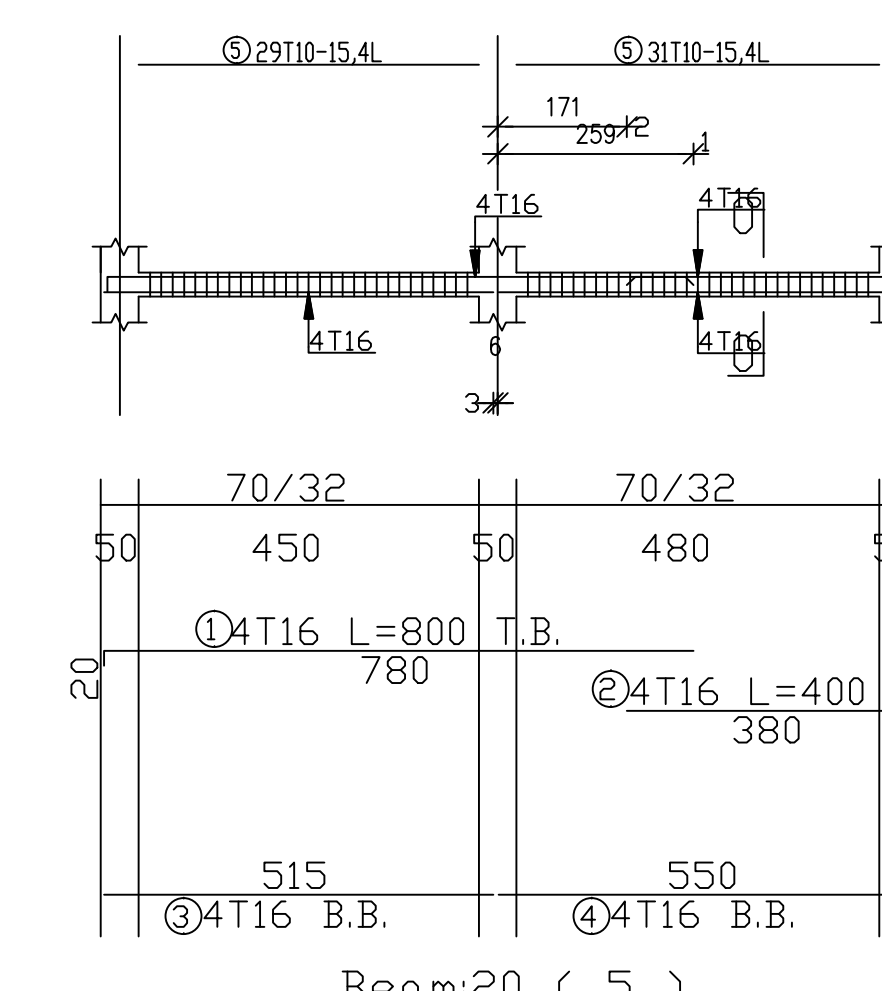
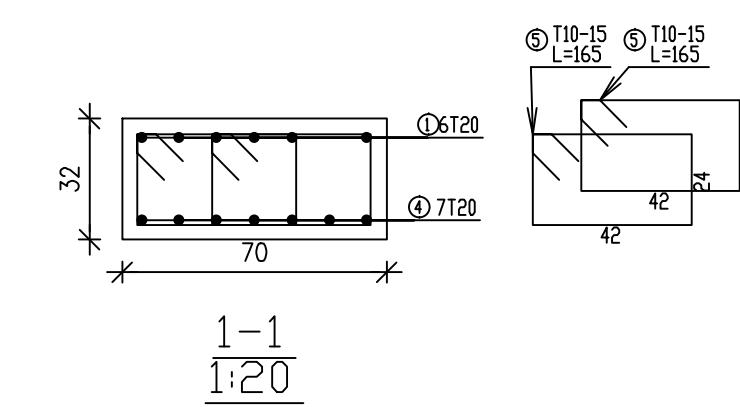
Beam:16 (5)



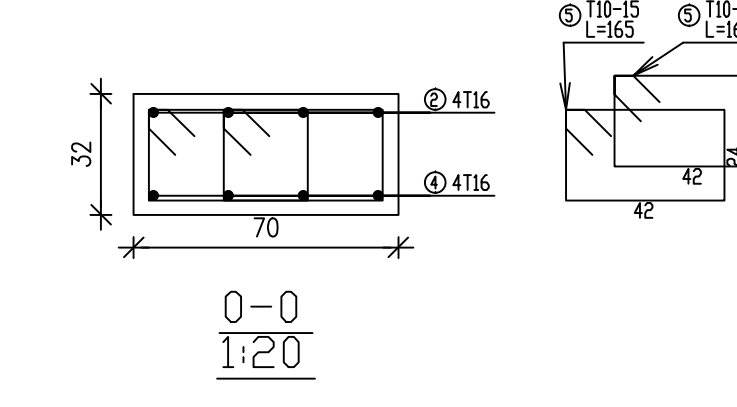
Beam: 17 (5)

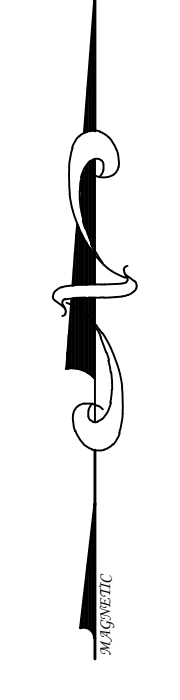
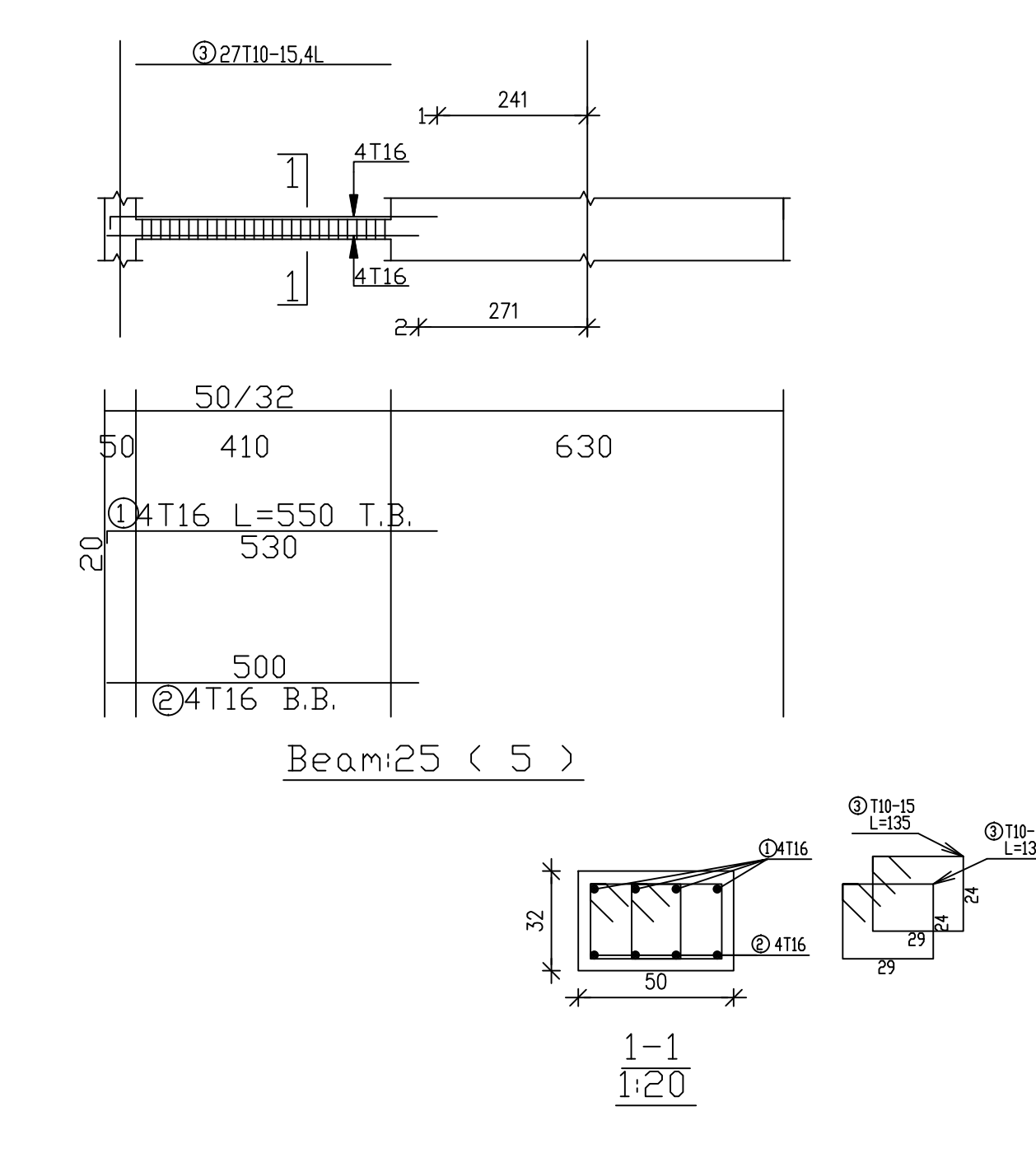
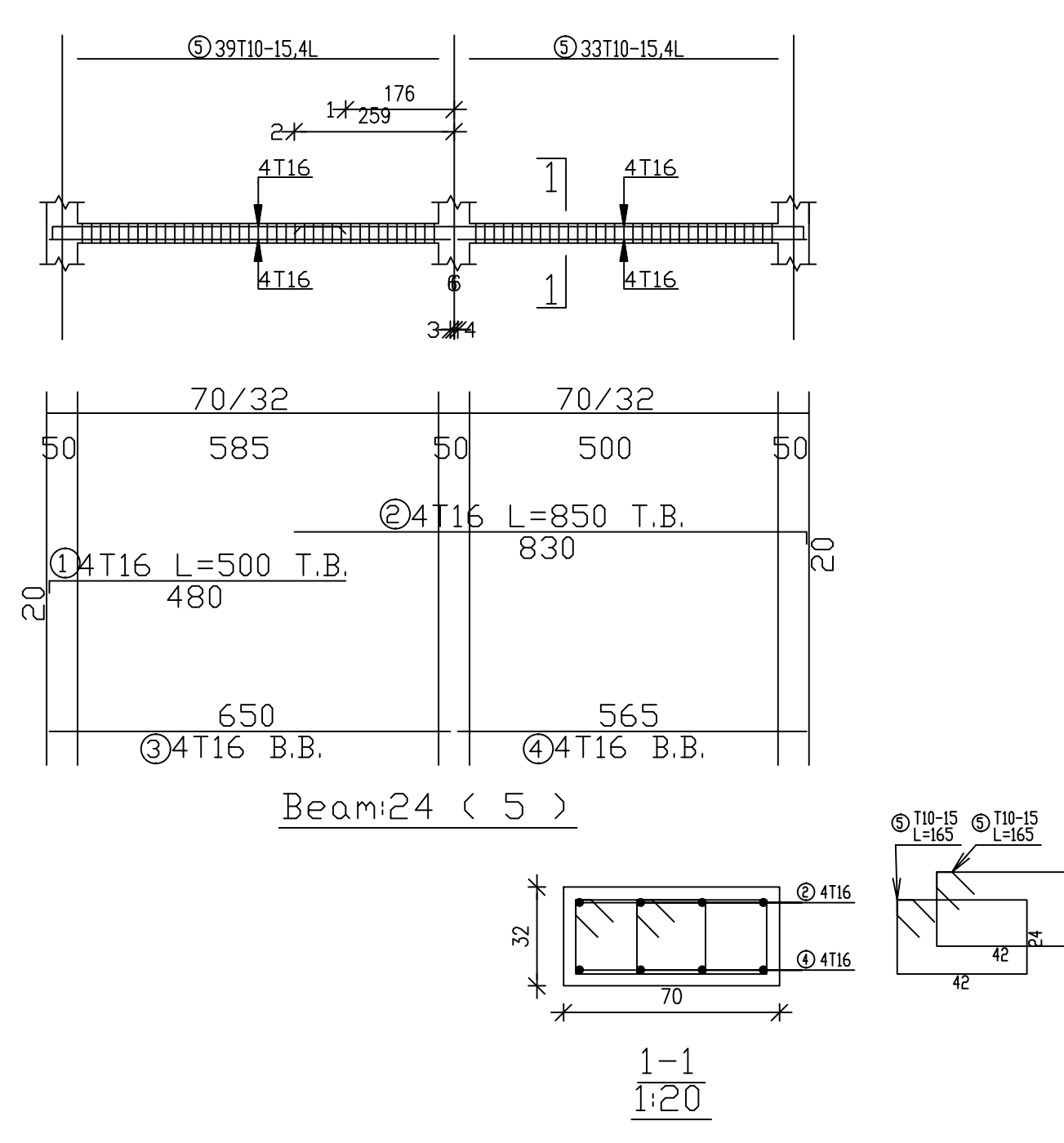
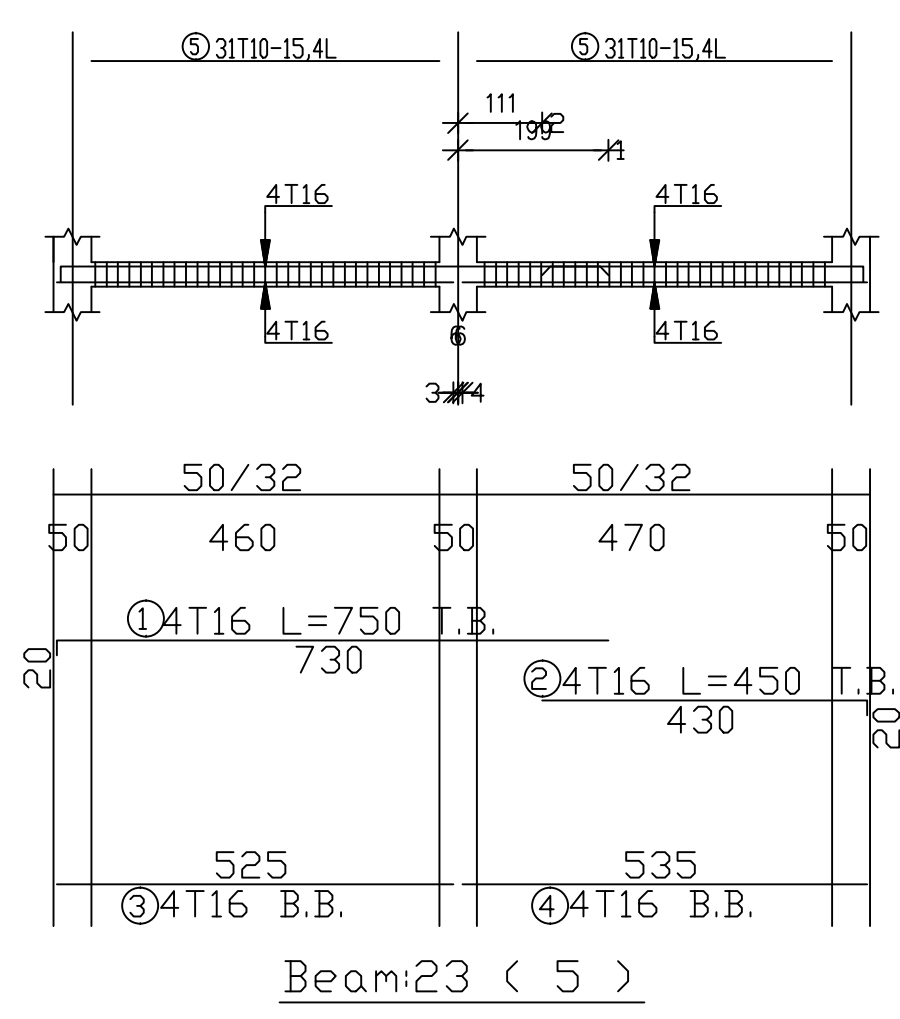
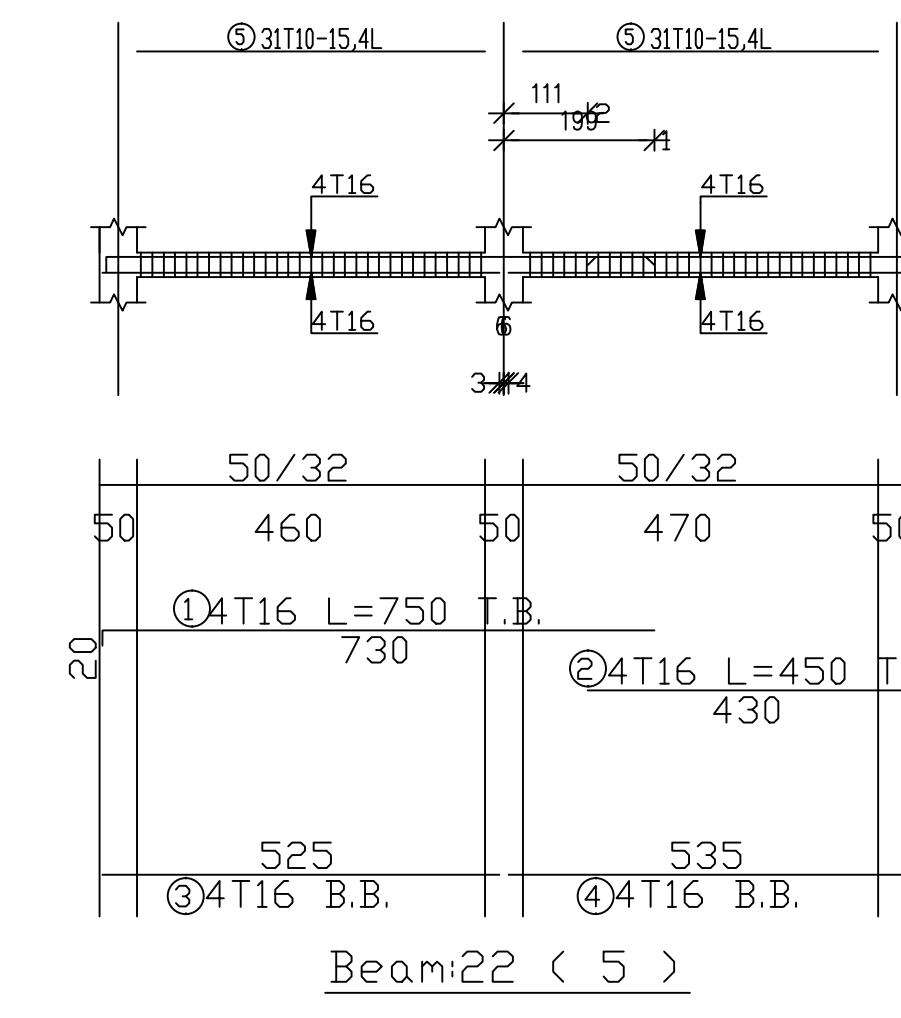
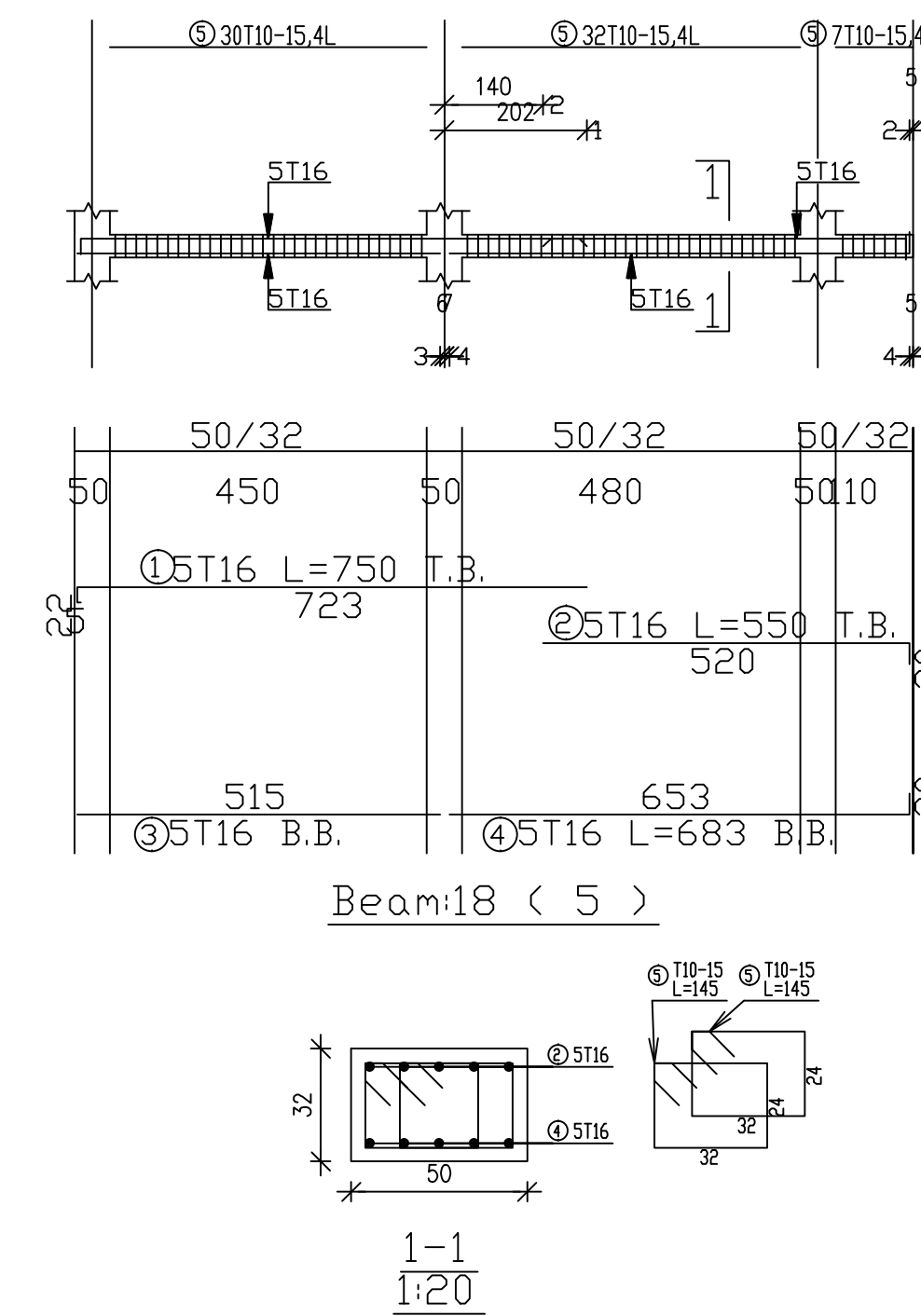
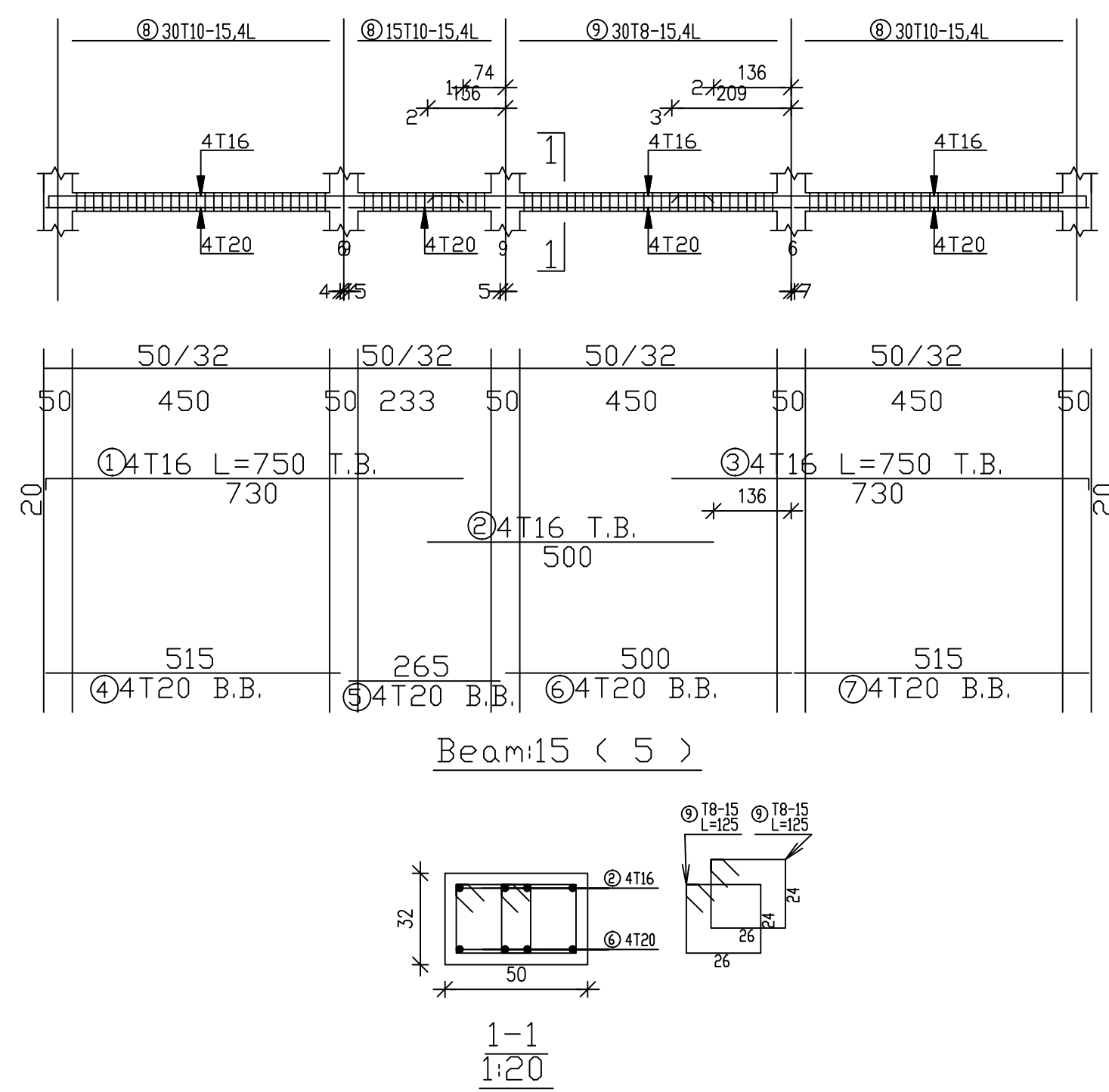


Beam:19 (5)



Beam:20 (5)





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Graduation Project

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*DRAWING TITLE :
BEAMS DETAILS*

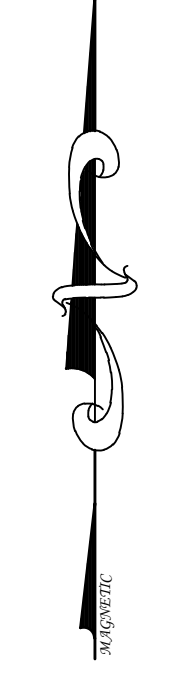
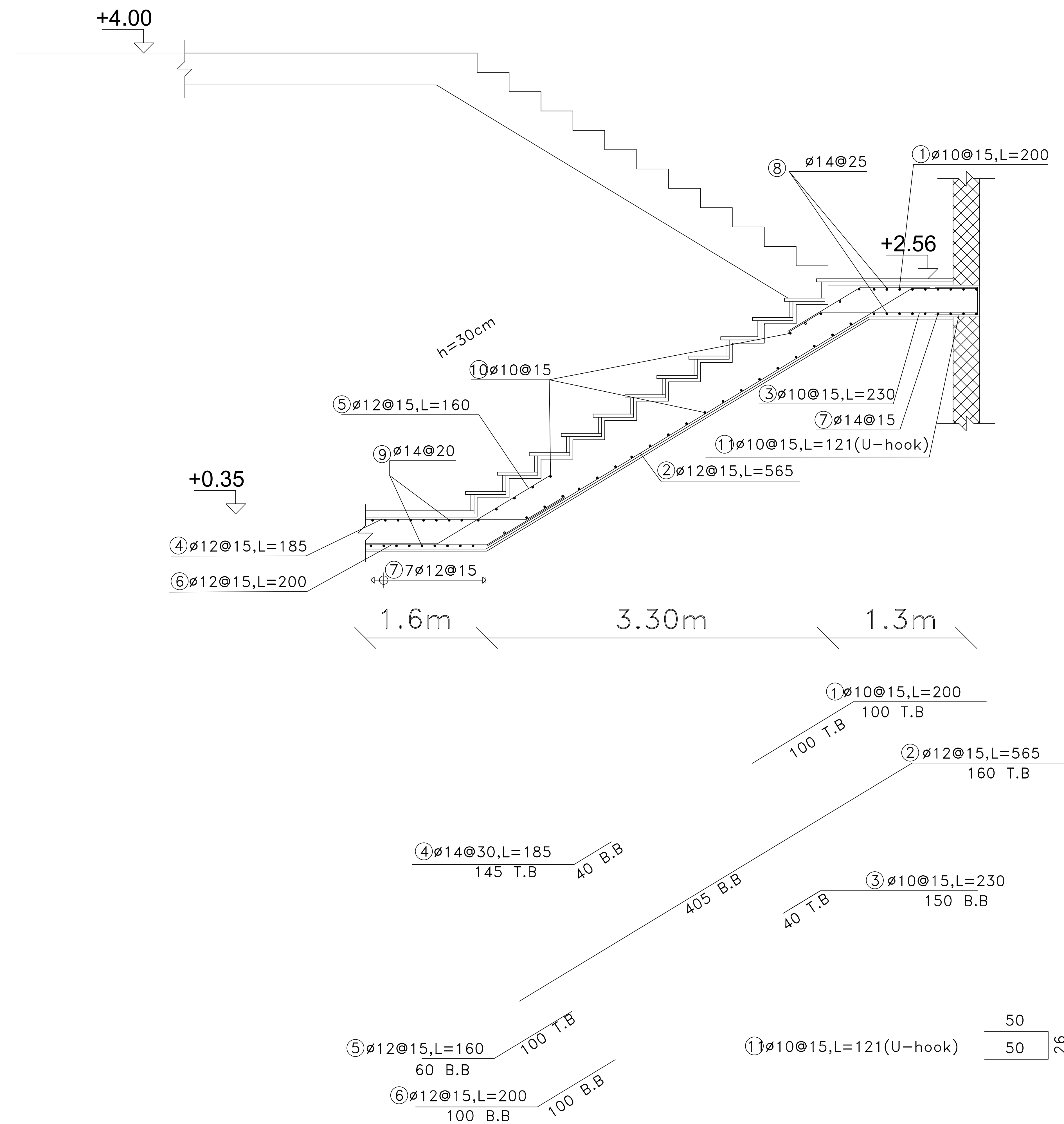
Supervisor :

Eng- shadi qumsiah

Designed by :

*shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem*

SCALE	No. of DRAW
1/200	548



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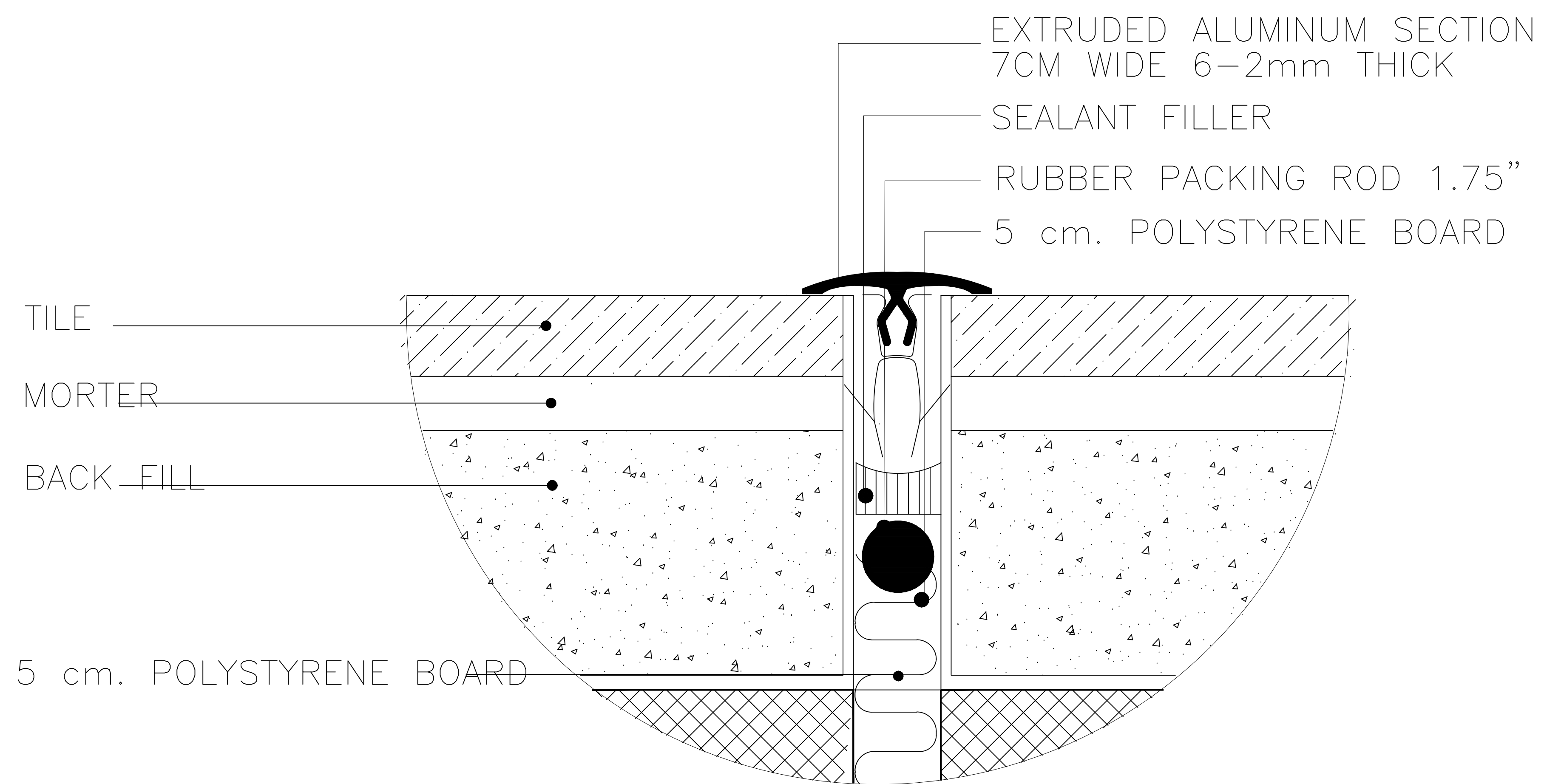
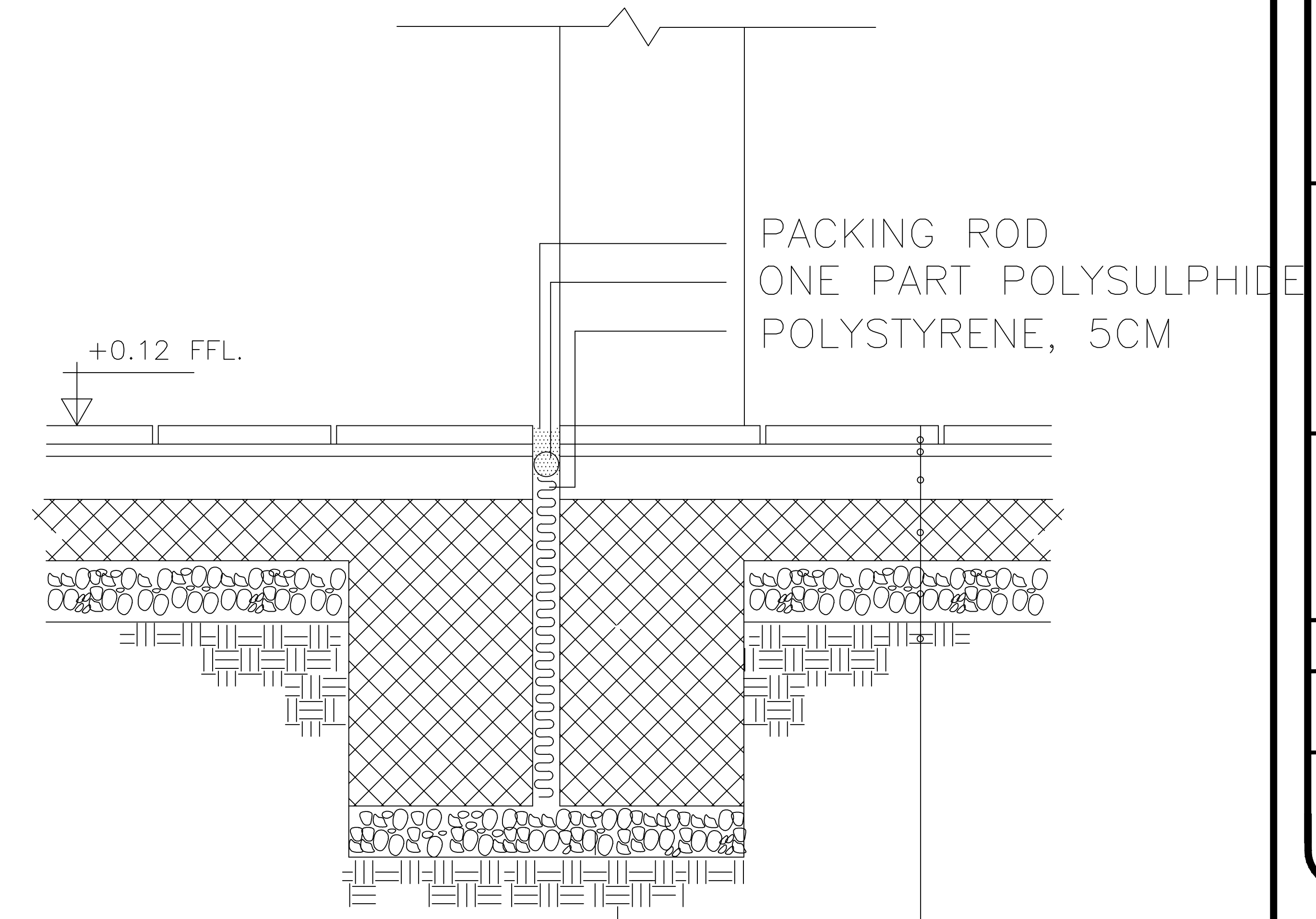
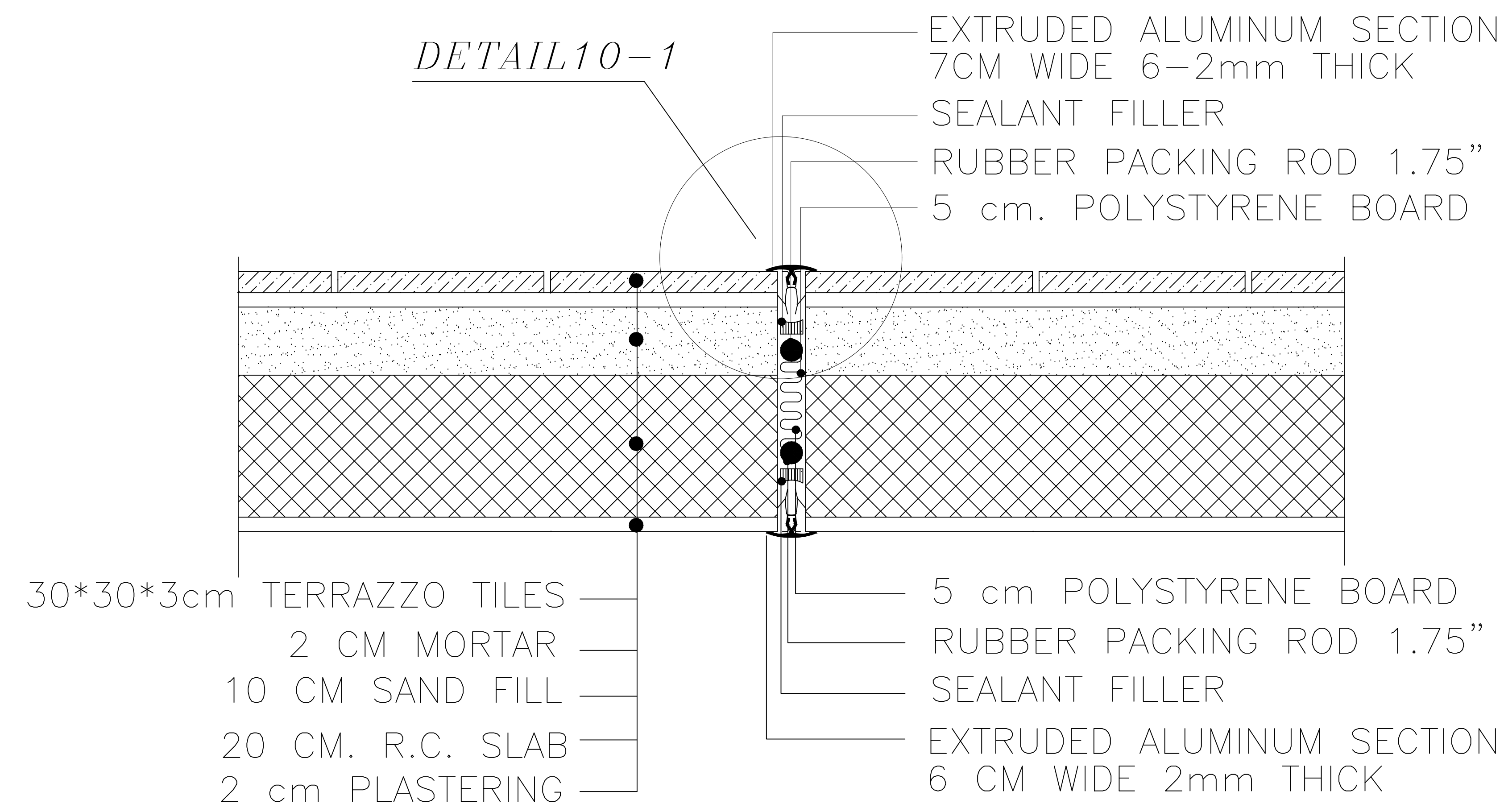
DRAWING TITLE :
 Stair
 Reinforcement

Supervisor :
 Eng- shadi qumsiah
 Designed by :
 shaimaa salah
 moatasem zedat
 mohamad salameen
 nadeen melhem

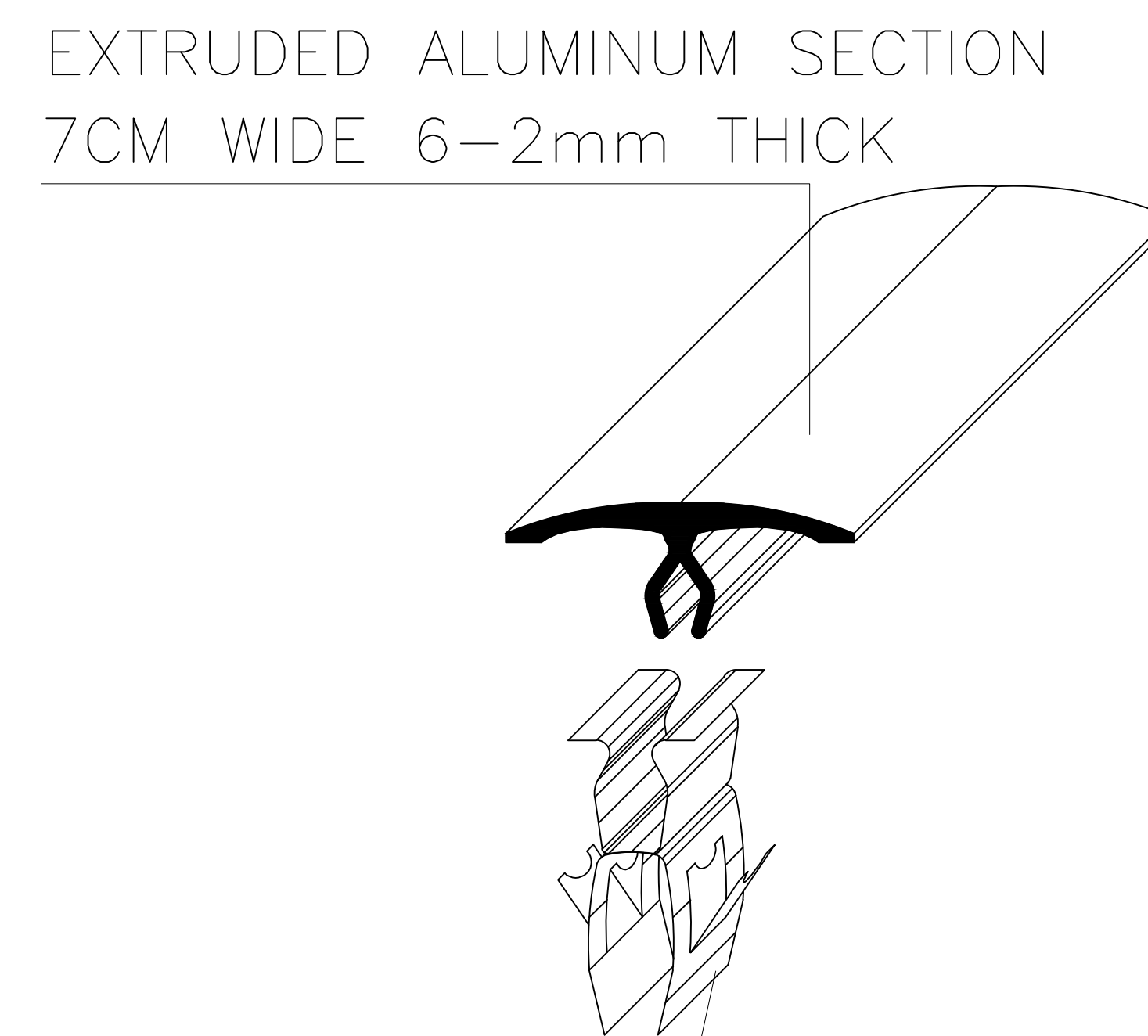
SCALE	No. of DRAW
1/200	549

DETAIL OF HORIZONTAL EXPANSION JOINT AT FLOORS

Scale 1:20



DETAIL 4-1



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DRAWING TITLE :

Expansion Joint at
Floor

Supervisor :

Eng- shadi gumsiah

Designed by :

shaimaa salah
moatasem zedat
mohamad salameen
nadeen melhem

No. of DRAW

550